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NOTE.—Cross references have been avoided as far as possible, and all articles indexed under both the subject and the name of the author. Illustrations are given under the name of the photographer only. The following abbreviations are used: Art., article; corres., correspondence; illus., illustration; illus. art., illustrated article.

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PHOTOGRAPHY. MAY 12TH, 1908.

PHOTOGRAPHY

A JOURNAL FOR EVERY CAMERA USER.

EDITED BY R. CHILD BAYLEY.

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GETTING UP SPEED.

BY J. M. TOMLINSON.

Awarded the Bronze Plaque in the Locomotive or Train Competition.



EDITORIAL

'Photography and Focus.'

Were we so inclined, we could fill a very respectable portion of this issue with commendatory letters and congratulations on the union of *Photography* and *Focus*. Any space that was left might be occupied by a statement of the unparalleled position in which the joint paper finds itself and the perfectly stunning things that it is going to do. We prefer to take all these as read—"to cut the cackle and come to the osses." Here is the sort of paper which we hope to be able to provide week by week—not a special enlarged or inflated issue, but an average sample. We hope it will commend itself to all readers of *Photography and Focus*, and shall spare no pains to keep succeeding issues up to this standard, or, if we can, to raise them above it.

Spring Cleaning.

The unpleasant, if necessary, annual operation bearing this title has recently been inflicted upon us, both officially and domestically. In an ideal state of things spring cleaning should no longer be a necessity, or perhaps we should say spring cleaning would be perennial. Life would be one long purification, carpets would be always up and curtains always down, and the aroma of soapsuds wafted to us by every breeze that blows. It is a counsel of perfection in ordinary everyday affairs, but (we say it in all seriousness) it is not an unattainable ideal, but an absolute condition of successful photography, that the work room, dark or light, shall be as clean whenever it is used as if it had only just left the hands of the spring cleaners. It is not possible to exaggerate the importance of strict cleanliness in photography. The ordinary non-photographic individual may be very cleanly, according to his lights, but unless he is a chemist, or at least has studied chemistry, he does not know the meaning of the phrase "chemically clean." The photographer has got to know it. He has got to learn to keep his dishes and bottles so clean that they do not affect the very sensitive solutions he puts into them. He has not only got to clean them, but to keep them clean. The dust of the room, not otherwise perceptible at all, may completely ruin his best negatives or prints. A perspiring finger may leave a mark which no retouching or pencilling will hide. Let those to whom its importance has not yet appealed take our advice. Let them inaugurate the most strict spring cleaning amongst their photographic paraphernalia, and when it is

finished let them register a vow to keep it all in its present pristine condition. It will exercise quite as great an effect on the quality of their work as can be got by paying three or four pounds extra when buying a camera or lens.

Watkins and Development.

The important announcement which will be found on page 4 this week is one which will interest every reader of *Photography and Focus*. Whether he be a beginner or the oldest of old hands, he is continually brought up against the problem of correct development.

As it has long been recognised that, within wide limits, there are certain definite and ascertainable time, temperature, and developer which, mutually adjusted, will give the best result upon any particular make of plate, anything which helps us to ascertain what those are helps us to develop successfully. Mr. Watkins says in effect here is a developer, here is a list of plates on the market, and against each plate is the time it requires in this developer at 60° Fahr. to develop up as perfect a negative as can be got from the exposure

the plate has received. If the temperature of the dark room is 60°, then all we have to do is to put the plate in the developer for the time named. If it is some other temperature, then a simple revolving scale on the developer bottle tells us what the time should be. It all sounds delightfully simple. Mr. Watkins's things always do. We have not got the developer yet; but there seems no reason to doubt that it is based on sound principles, and we shall be very much surprised if it does not do all that is claimed for it.

Leaky Shutters.

The experiences of Mr. Robbins, which will be found on page 22, point to a source of trouble which it is well should be recognised. No form of instantaneous shutter is so popular on hand cameras to-day as the excellent, pneumatically-regulated diaphragm shutter of which the Bausch and Lomb Unicum may be taken as the type. But all mechanism is fallible, and mechanical injury, or even dirt, may so far affect the working of a shutter that, while on a cursory examination it seems to be in good order, actually it is not. Curious markings on the plate, which look like light fog, yet do not have that streamer-like appearance by which we usually recognise stray light in the camera, may be due to light leakage at a defective shutter.



There is only one way to make sure on such a point, and that is to muffle the head and camera in a large and opaque cloth, turn the lens towards as bright a light as is at command, and carefully to examine the appearance of the closed shutter under these conditions. No trace of light should be perceptible through it.

If light does get in, it should be found in the same way, whether it is light leaking between the blades of the shutter, having come through the lens in the ordinary way, or whether the light has got to the shutter, as in our correspondent's case, by some less direct method. Once known, the proper remedy will suggest itself.

DISTANCE LENDS—?

Now Biggs had been upon a tour of greatest magnitude, He'd travelled with his camera through every latitude; He wandered round by Czernowitz and into Czenstochov

(The language, here, was quite enough to set his shutter off).

He'd taken "snaps" in France and Spain; in far Beluchistan;

His "spools" recorded stirring scenes in China and Japan;

In Siam and in Borneo; from Bombay to Calcutta, With energy, he worked his indefatigable shutter.

He went through Patagonia, through Chili and Peru, Till, feeling quite exhausted, he arrived at Timbuctoo; And then he packed his kit away, and sailed for England's shore;

Delighted, when he found himself in his dark room once more.

His friends came round; admired his views; and then, at his request,

Selected half a dozen, which they all considered best; With one accord, they all exclaimed, "The finest things you've done,"

"Great Scott!" said Biggs, "Why those I 'took' on Hampstead Heath, for fun."

Kinematograph Pictures in Colour.

During the past few days considerable interest has been aroused by the display of animated photographs in colours, a problem on which Mr. Albert Smith has been at work for some time. The colours were certainly very faithfully rendered, and as a testimony thereto, Autochrome pictures of the same subjects were shown for purposes of comparison. The difficulty has been in the matter of exposure. If three-colour records are to be obtained, the exposures have to be made through suitable light filters, and, as our readers know, these, especially in the case of the red filter, prolong the exposure very much. Yet for kinematograph purposes the exposure has to be exceedingly short.

Mr. Smith's task has been to reconcile these contradictions. The superposition of the three images on the screen has been got by means of a single bioscope, the different pictures, through suitable colour screens, being projected not simultaneously but in rapid succession, the principle of persistence of vision, upon which all kinematograph work is based, being relied upon to combine them into a single effect upon the eye. The

results, which were shown at Urbanora House last week, were, as we said before, wonderfully successful.

Glazing Postcards.

One of the points upon which we have been consulted very frequently of late is the glazing of photographic picture postcards. We do not mean the mere imparting of a high gloss to cards on P.O.P., bromide, or gaslight papers; that is done by squeegeeing to a ferrotype or pulp board in the well-known manner, and needs no further reference. But a good many of our readers seem to have postcards printed upon plain paper, sometimes printed from half-tone blocks and coloured, to which they wish to impart the high degree of gloss that is so easily obtained in the way that we have just mentioned.

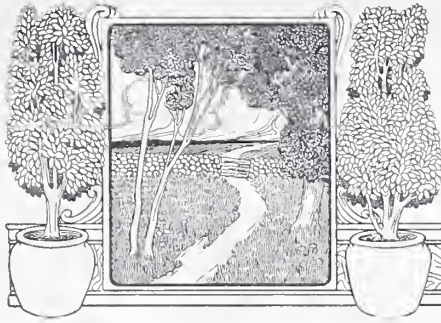
The thing is done, as specimens to be bought in any picture postcard shop are sufficient to prove; the question that is put to us is, how is it done? In every case that we have examined, and we have examined a good many, the card has received a coating of gelatine, and then has been squeegeed down in the ordinary way.

The actual details are not available, but if any of our readers care to try it for themselves, it should not be very difficult. Ordinary white gelatine should serve, and a liberal coating of a fairly weak solution should be given, the actual strength being determined by trial. It would, no doubt, help to facilitate matters if a little chrome alum were added to the solution. The cards after being coated should be allowed to dry thoroughly, and then be squeegeed down upon the ferrotype or pulp in the usual way.

The Loving Photographer.

The daily press recently has been making merry over Mr. Storey's dictum that the photographer in love will make a better picture of the loved one than if he is not a victim of the universal disease. The question which arises is that which the boy asked himself after he had mastered the alphabet, "Is it worth going through so much to learn so little?" Is it put forward as an amatory apology or as a counsel of perfection? Are we to fall in love to improve our photography, or does the improvement justify the weakness? Unfortunately for the success of these speculations, the truth seems to be that the photography of the beloved object, while improved by the affection, may be the very cause of the affection's decline. Engineers tell us that force cannot be created—nothing can be got from nothing. The electricity which lights our houses or draws our trains is only a reappearance of the force the coal plants received æons ago from the sun itself. The improvement in a photographer's portraits in like manner may simply be a fresh manifestation of the force which originally was a passion for his sitter, and the greater the improvement the weaker becomes the passion which is its raw material. Fair readers who desire to retain the affections of photographers need not be downcast, nevertheless. We have seen nothing about recently which would suggest that any great quantity of love has been worked up in the less romantic form of bromide enlargements.

The New Title Competition starts this week. See page xlv.



Development Made Easy.

The Latest Advance by Mr. Alfred Watkins, of
Meter Fame.

*A standard developer for all plates, with a scale to show at a glance
how long the plate should be left in it.*



IF there is one thing more than another which has helped to make smooth the path of the amateur photographer, it is the Watkins exposure meter. The beginner who has once learnt to use it properly—and the learning is not difficult—is in a better position to know the correct exposure than the most skilful worker without it. We hold no brief for Mr. Watkins (we have had occasion at times to differ from him), but we cannot withhold our tribute to this remarkable little instrument, and to the labours which have made it possible and keep it efficient.

It has long been known that Mr. Watkins has not stopped with the conquest of the exposure problem, but has been at work on that of development, and factorial development which he worked out has an immense number of users and advocates to-day.

This is not to be wondered at. To make good prints we must have good negatives. Ninety-nine per cent. of the bad prints sent to us for criticism and advice are bad simply because the negatives are bad. It is a very difficult lesson for the amateur to learn. It seems hard to understand that the silver print which looked well when taken from the printing frame, but was weak and washy and a bad colour when taken out of the toning bath, owes that washiness to a bad negative, and not to an unsuitable toning formula, but it is so.

Now, to make good negatives, nothing more is necessary than to expose the plate for the correct time, and to develop it in a suitable developer for the correct time also. The first is done with the help of the exposure meter; and the second will in future be made quite as simple.

For we are on the verge of a very important advance in photographic practice—an advance which will appeal particularly to the beginner who has had trouble in his negative making. All this bids fair to vanish. This article is the first announcement of the latest of Mr. Watkins's inventions, and it is to the inventor himself that we owe the fact that the readers of *Photography and Focus* are now the first to learn of the advance.

The "Watkins Time Developer" is a concentrated solution of the metol-hydrokinone type, containing no bromide, and suitable for all plates, films, lantern plates, bromide and gaslight papers. It is a single solution, and for ordinary negative work is simply diluted with water, one dram of the developer making one ounce by dilution. So far, of course, there is nothing new in it. Such developers have been made before, and will be made again. But here comes in the new feature which makes it so useful.

In addition to the speed numbers, of plates which are given, as our readers know, on the Watkins speed card, a development letter will be given, indicating approximately the time taken by the plate to develop in this standard developer at 60° Fahr. Round the bottle of developer is a label bearing a scale of minutes, and round this is a band bearing a scale of degrees. Setting the 60° mark against the number of minutes which the plates in use require, which number will be given on the speed card, all that has to be done is to glance at a thermometer hanging in the room and then to read off on the bottle the number of minutes to develop.

There is then no need to examine the progress of development, no risk of fogging the plate by holding it up to the dark room light, or by watching at the early stage for the appearance of the image, a stage when light fog is most to be feared. The correct time is read off, the plate slipped into the developer, the dish covered and rocked until the time has elapsed, when the plate is taken out and fixed.

Writing us on the subject, Mr. Watkins says:

"I have pretty well completed a test of all the plates and films, for *development speed* of each, and shall in future give this on the speed card, in addition to exposure speed. The variation of time with different plates is very striking. I divide plates into seven groups, two and a quarter minutes being the average time, at 60° Fahr., with my developer, for the quickest group, and eleven and a quarter for the slowest group. Of course, this can only be taken as approximate, as makes are not always uniform. The groups will be given by letters VQ, Q, MQ, M, MS, S, and VS, and the information will, I think, be useful to those who do *not* buy my developer. . . . I expect to have it out in a month, as all plant and materials are ready. . . . I have in preparation an adjustable thermo-calculator, for developers of different temperature co-efficients, to be made in metal."

The simplifying of development which this important announcement suggests is one which is certain to be heartily welcomed. The "Watkins Time Developer" will be put on the market in shilling bottles, containing enough to make forty ounces of developer, and those who use factorial development may be interested to know that its Watkins factor is 15.

We have given above the whole of the information we possess at present with regard to it; as soon as any more comes to hand it will be published in *Photography and Focus*.

A fresh title competition starts this week. A sum of over sixteen pounds, in cash prizes, was distributed in the last. The picture for which a title is to be found is on page xlv.

CHATS WITH A BEGINNER

ON THE MOVEMENTS OF A CAMERA.

1. The Focussing Screen.

By E. LLOYD.

THE word camera means room or box, and the simplest form of camera is nothing more than a box, with the lens fixed on one side of it, and a receptacle for the plate attachable on the opposite side (figure 1). If this box is quite rigid, is light-tight, and is painted a dull black inside, so as not to reflect any light that falls on its interior, it will serve perfectly as a camera for a great many subjects. But the photographic possibilities of this simple box-form apparatus are limited; and the photo-

partially transparent, and will be found to have a surface that stops enough of the light from the lens to enable the image to be seen, while allowing us to look through it at the picture, which appears to be formed on its roughened surface. Such a camera is shown in figure 2.

One of the first requirements would be some kind of focusing arrangement, by which the picture that is to be photographed can be seen and arranged. If we could get inside such a camera the picture would be seen on the white surface of the plate like the picture on the sheet at a lantern show, which is produced by what are the same optical arrangements. But we cannot get inside, so we must try and get something that will enable us to see the picture from without. If a piece of plain glass were substituted for the plate we should see no picture at all, as the light from the lens would pass through it uninterrupted. A piece of ground glass is only

Ground glass, accordingly, is most generally used for the focussing screen; but ground celluloid is sometimes employed in small cameras, and at a pinch, when the focussing screen is broken, a piece of tracing paper or tissue paper stretched across a piece of plain glass may be used. Celluloid is not suitable except in very small sizes, because it cannot be kept flat, and it is important that it should be quite flat.

Ordinary ground glass is rather coarse, and it is not always easy to see on it when the picture is perfectly sharp. Specially ground glass of a fine texture is now supplied for the focussing screens of cameras, or may be made quite easily. To make it two pieces of plain glass the size required are taken, and one of these, supported on a few pieces of newspaper to make a smooth bed for it, is placed flat on a table. Its sur-

...and the other end of the line is placed into a tank. The tank

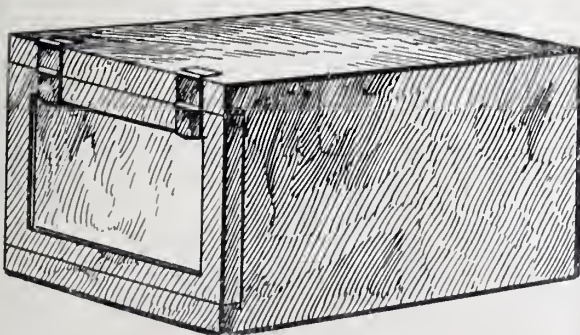
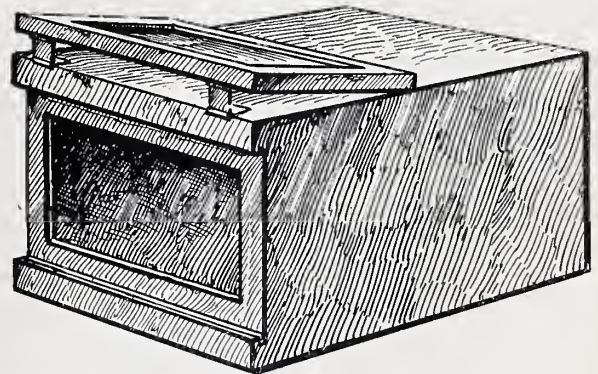
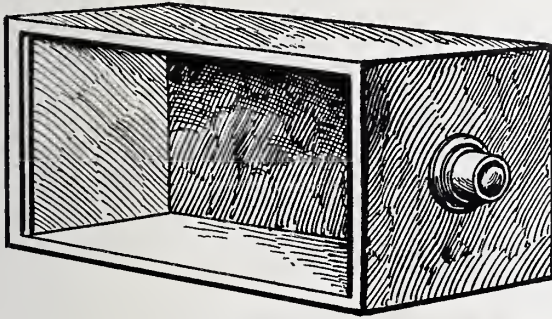


Fig. 3.—The same camera, but with the focussing screen folded back to allow a plate holder to be inserted.

Those who are not familiar with cameras sometimes fail to see the picture on the ground glass at all. This is due to the attempt to look through it rather than on it. But at times it is difficult, even for the practised photographer to see the picture. This is particularly so, at the corners of the plate, and one must be careful, consequently, not to overlook the picture in these parts. The ground glass is provided that we may see and arrange what we are going to photograph, and we ought not to attempt to take our picture until we have satisfied ourselves that every part of that picture is as correct as we can get it.

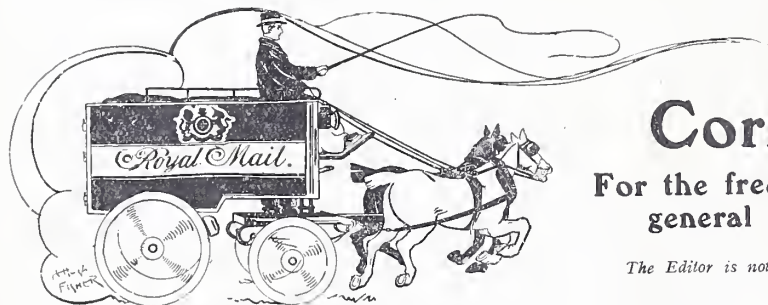
The focussing screen is generally fixed in a wooden frame, which is either quite separate and detachable, sliding in and out of grooves, or else is carried on a couple of double hinges, so that it may be folded on to the top or the side of the camera, out of the way of the plate (figure 3). If the latter, we must make sure, when focussing, that it is firm and flat on the camera itself, in the position it is intended to occupy.

The ground side of the ground glass is that which is generally turned towards the lens, and it is designed so that when it is in its place that ground side is exactly the same distance from the lens as the coated surface of the dry plate is, when it too is in position. This is important. In a few patterns of camera, of which the glass plate Kodak is the best known, the shiny side of the ground glass is turned towards the lens.

It does not matter which is which in designing a camera; but in using a camera it is absolutely necessary that that side of the glass which the maker intended shall be the side which is turned towards the lens.

When a camera is bought it may be assumed at first that the ground glass and the plates are strictly in register with each other, the plate when the exposure is being made occupying the precise place occupied by the ground glass. Later on in a chat on the subject of testing a camera, we shall show how to examine it on this point.

In consequence of the pressure upon our space this week, a number of reviews, etc., are unavoidably held over.



HYPO AND ALUM TONING OF P.O.P.

Sir,—With reference to the paragraph in *Focus*, April 22nd, page 381, on this subject, permit me to state that I have been using hypo-alum for toning P.O.P. for considerably over two years, to the exclusion altogether of gold chloride.

I explained my method of working, and passed round a number of prints finished in this way, at the Glasgow Eastern Amateur Photographic Association on the evening of May 6th, 1907, at the close of one of Mr. Dan Dunlop's lectures.

I may say that the present secretary of the G.E.A.P.A., Mr. Alex. Gault, first brought the subject to my notice, having discovered it in much the same accidental way as your correspondent, Reg. Read. This will give very good tones in about half an hour.

Hypo	...	...	...	...	1 ounce
Water	...	...	...	...	10 ounces
Saturated solution of alum	...	...	...	...	½ ounce

As regards permanence, I have prints exposed to light and air since June, 1906, that show no signs of deterioration.

Yours, etc.,

ANTHONY LOVE.

DARK ROOM BLINDS.

Sir,—With reference to Mr. Lang's letter in *Photography* on this subject, I should like to point out to those who may be thinking of adopting this mode of lighting for their dark rooms—

(1) That if the window is of any size—which apparently it would be—pinholes in the fabrics would have to be carefully looked for and avoided, as they are not at all uncommon.

(2) And more important still, fading would have to be carefully watched, as all fabrics, and even glass itself, are liable to fade in ordinary light, more especially if the window to be darkened should be exposed to direct sunlight.

The Camera House Price List.

THE publication of a price list weighing something like 3½ lbs. marks a stage in the progress of the Camera House firm, upon which Messrs. W. Butcher and Sons, Ltd., are to be congratulated. The handsome volume which lies before us is an advance copy of "The Camera House Price List," and contains a thousand closely printed pages, which deal with every conceivable photographic requirement.

The list has been produced primarily for dealers, and will be distributed to them all over the country before these lines appear in print. Dealers who have not yet received a copy had better get into communication with Messrs. Butcher forthwith. As it may be that many amateur photographers also will be glad to have such a general reference book on their shelves, a limited number will be available on sale at three shillings post free.

One feature of the list is the very complete and fully illustrated section dealing with mounts; a folded sheet printed in colours reproduces the appearance of a number of the mounts very successfully. As an example also of the way in which the dealer is studied, we note that Messrs. Butcher have instituted a uniform colour scheme throughout all their box labels, price tickets, and instruction cards, so that the display of a number together shall be attractive and harmonious.

We congratulate the firm on issuing so large and handsome a testimony to the importance of its business and to its comprehensive and go-ahead character.

Correspondence.

For the free discussion of all matters of general interest to photographers.

The Editor is not responsible for the opinion of his correspondents.

It may be remembered that in the Lumière Competition in 1895, one of the prize negatives was obtained on a Lumière panchromatic (C) plate taken in a room the windows of which had been covered by an orange paper; obviously, therefore, great care is needed.

On December 13th, 1895, Mr. A. Roads and myself published a paper in which the comparative safety of numerous papers and fabrics was ascertained, both experimentally and spectroscopically. The results showed clearly that some of these media were not nearly so safe as they were supposed to be, and doubtless many cases of fogged plates are due to the employment of an unsafe dark-room light.

Yours, etc.,

J. H. BALDOCK, F.R.P.S.

USING SPOILT FILMS.

Sir,—May I suggest a use for spoilt films—one that I have never seen suggested, but which I have long found to be of good service?

There are times when it is desirable to have a firelight effect—as in a picture of some one brooding over a fire. Magnesium powder thrown into the grate for this is sometimes a bit risky (according to the latest transaction with a chimney-sweep). But an old film cut up may be safe. If cut up very small and thrown on the glowing embers it is almost equal in its flash to magnesium, and almost as brief in its light; but if cut in larger sizes it is equally effective, and burns longer. An assortment of this sort, cut up ready, ranging from nearly dust to lin. square, or larger, can thus not only supersede magnesium; but can also give illumination enough for the scope of a camera; and this not to speak of the virtuous feeling of having made use of what we had long regarded as useless.

Yours, etc.,

(Rev.) J. REID HOWATT.



VERA. BY
H. COSTELLO.

FROM THE PORTFOLIO OF
THE IBIS CAMERA CLUB.



"Critics!—appalled I venture on the name,
Those cut-throat bandits on the paths of fame."—BURNS.

"YOU cannot see the wood for the trees" is, I believe, a proverb, although, unlike most proverbs, its point is not very self-evident. With a slight alteration, however, it is often peculiarly applicable to photographs of what we call "sylvan scenes." They fail to be effective because you cannot see the picture for the trees. They contain too much of a good thing—too much tree, to wit—and for all that may be said to the contrary, you CAN have too much of a good thing; far, far too much. Every picture should contain one good thing, and no more. In addition it may contain a lot of less good things; minor parts helping to combine and build up the perfect whole. But the one good thing must not be competed with by any other equally good thing; it must be king of the composition. Rivals will only dim its lustre, or quench it altogether, if they are in sufficient numbers.

Given that we enter a wood with our cameras, we are in search either of a



In the Talbot Woods, Bournemouth.

By Miss H. C. Hull.

photograph of trees, or of a photograph of the "effects" (of atmosphere or of composition) which typically occur amongst trees.

Of the woodland prints from which I make my choice for this article, there

is not a solitary specimen which comes within the first definition. All of the prints, without exception, seem to me to be attempts at rendering the "spirit" of woods, not attempts at rendering the woods themselves. Some I might have supposed to be topographical from their titles, e.g., the view called "In the Talbot Woods, Bournemouth;" but clearly this is a misnomer. This is not the Talbot Woods; still less is it Bournemouth. It is an effect, a phenomenon of light and shade, a sentiment. The fact that the phenomenon was found near Bournemouth has nothing to do with its beauty. Pinewoods anywhere else and sunlight anywhere else might have supplied the same result.

This print, I grant you, is a success. But it is a success in spite of its faults. It all but falls under the category of the failures which are failures because they include too much of a good thing. It is a woodland scene nearly spoilt by too close attention to the woodland. It has no pronouncedly principal tree; half a dozen of them struggle for the supremacy.

Mark you, I do not say that this prevents it having a principal object. The principal object in this view is not a tree, but the patch of light and the sensation of atmosphere. The lady who took the picture knew this, of course (perhaps unconsciously), and she therefore said to herself, "I will get the



"In Tillingbourne's Smiling Valley, Surrey."

By William C. Beecroft.

mistiness of my sunlit glade all right, and then the too straight row of solid black trees will be overlooked, or at least forgiven." And she was partly justified.

All the same I do believe that unless she was in a frantic hurry to catch the light, she might have taken a little more pains with the minutiae of her composition. Without having been at her elbow on the spot I cannot say whether she should have shifted her camera a little to the right or to the left, or a shade back or a trifle forward. But she ought to have shifted it, anyway; and shifted it, roughly speaking, so as to have got one tree larger and nearer and more prominent than the rest; indeed, if possible, so as to have got one tree so much nearer than the others that, while it was black, the others looked grey, owing to the depth of the atmosphere between king, as it were, and subjects.

The author of "Woodland Mist" has learnt the necessity for getting one big tree as a sort of nucleus to his picture and subduing the others by contrast; but I am afraid I think he has done the work clumsily. The tree does not happen to be a very shapely one, and as balance at the other side he has chosen to show us one which does. The tree on the right, I am bound to say, is a more pictorial tree than that on the left; yet the tree on the right is a secondary incident in the theme, and that on the left is the alleged keynote of the picture. This is unfortunate.

One cannot but keep on looking at that nicely sketched tree on the right and wishing that the photographer had taken it instead of this lump of a thing on the left. Just cover up the tree on the left, and see how charming that on the right looks at once. Alas! it can't be helped now; and as the King must have no rivals, I can only suggest that the tree on the right be trimmed clean off. But it's a pity.

"In Tillingbourne's Smiling Valley, Surrey," is the rather naive title of my third example. Here we have woodlands used as a background with such thoroughness that it's rather a task to see the foreground. The whole thing, for a landscape, is too "close up," too crowded, too all over alike. Somehow—I admit I don't know how it could have been done—the photographer ought to have got some atmosphere between his subject and its leafy background. And oh, why did he invite his friend in the straw hat to pose in

the middle of Tillingbourne's Smiling Valley? Prithee, is Tillingbourne the Crystal Palace, that it should be treated thus?

Personally, if I were dealing with this print, and could not adopt the



Woodland Mist.

E. Jepson.



The Woods.

drastic course of returning to photograph the scene under less flat atmospheric conditions, I should trim off the top, just below the figure's straw hat and collar (he is too dark to show appreciably without them). This would pull the composition together, and concentrate attention on the stream, which presumably inspired the exposure.

"The Woods" is the product of a man who can see "a pretty bit," but can't coax it into his camera and on to his plate. He does not know how to isolate, suppress, emphasise. All his trees equal each other in value, and the eye wanders from one to the other without finding rest—as the Irish Exhibition Judge said—for the sole of its foot. A bigger stop, next time, please, Mr. Artist; and—if I may make so bold as to suggest it—why not choose a rather less artificial and walked-through forest next time? This one makes one instinctively search amongst the detail for a keep off the grass noticeboard, or a request that visitors will not pick the flowers.

"A Reep Amongst the Bracken and the Firs" (reproduced on page 15) suffers a trifle from the alloverishness of our old friend Tillingbourne. The author has, it is true, managed to concentrate on a patch of the bracken very fairly soundly. But the firs themselves seem to have bothered him.

The two nearest ones are like gateposts; one gatepost as valuable and as upright and as proud of itself as its twin. One must be sacrificed. Two kings in our picture are as bad as twenty.

Delete the left-hand fir, and all's well. This could have been done when the picture was being taken, by simple alteration of the position of the camera, and the light patch of bracken enlarged and made more important at the same moment. I am afraid it is now too late, though, to get rid of that fir, except with the trimming knife, which in this case I am loth to recommend.

"There is a spirit in the woods," said Wordsworth. Could he have made the same observation if he had only seen a photograph of the said woods?

I doubt it.

And the moral which I draw from that doubt is this: Don't, O woodland photographers, derive your inspiration from the pictures of woods which have gained medals, been hung, or reproduced. Go to the woods themselves. Their secret is an elusive one, but you will catch it in the end far sooner

from them than—well, than from the cut and dried advice in my *Causerie*!

A PAPER THAT GIVES GREEN PRINTS.

IT is said that a paper which will give green prints may be made by coating ordinary paper with a two per cent. solution of gelatine. The sensitive is:

Potassium bichromate	15 grains
Magnesium sulphate	25 grains
Water	1 ounce

This mixture is spread over the paper in the usual way, and the paper dried in the dark. Printing is carried rather far. The print is washed, then surface dried or blotted off on a pad and laid film upwards on a sheet of glass, and the following developer is applied with a wad of cotton wool wrung out.

Pyrocatechin	5 grains
Water	1 ounce

The picture assumes a rich green colour when developed, and is then washed for five or ten minutes and dried quickly by heat.

Discoveries Due to the Camera.

Sir William Huggins uses it to find out the Nature and Composition of Stars and Nebulæ.

Illustrated by Photographs of what the Eye can never see.



Fig. 2.—Spectrum of Vega, enlarged. Showing the rhythmical series of hydrogen bands, between which are faint metallic lines. By Sir William Huggins.

PHOTOGRAPHY as a pastime is unequalled in its freshness and interest; but it is well if we take a wider glance at times, and try and realise that it is very much more than an excellent hobby. The camera has been a wonderful help in increasing the stock of human knowledge, and in the short series of articles, of which this is the first, some of the most remarkable examples of its help in this direction will be given.

Such a series starts, almost inevitably, with the work of Sir William Huggins. At his observatory at Tulse Hill, a southern suburb of London, ever since 1856, that patient seeker after truth has turned his telescope to the heavens, and extraordinary indeed have been the results. Sir William, who was knighted in 1897, has received at different times

for example, do the two shown in the first illustration tell to the astronomer? The dark bands which can be seen so clearly even in the reproductions are due to hydrogen. In the enlargement, figure 2, which is from a later photograph of Vega, these hydrogen bands are seen in a most beautiful manner, the rhythmical character of the spectrum being shown with wonderful distinctness. This series of lines was first seen in the small spectra shown in figure 1. Many of the lines are not visible to the eye, since they lie in the ultra-violet region, but they continue a visible series, which was already known. So that not only was something learnt of the constitution of these stars from the little photographs obtained at Tulse Hill, but we actually learn from the same source something about the hydrogen on this earth with which we were already familiar.

But these spectra tell much more than this. Between the strongly marked hydrogen lines are hundreds of other lines, which show that in these white stars there are many of the metals of which this earth is composed, but heated to an intense degree. In fact, stars of this kind are shown by these photographs to be suns, similar to, but not absolutely identical in character with, our own sun. Larger than it, in most cases, and probably much hotter.

One more of these tell-tale photographs remains to be dealt with. In figure 3 we have something very different from the



Fig. 1.—The upper spectrum is that of the bright star Vega, and the lower that of Spica. Taken in 1875. By Sir William Huggins.

most of the honours which science has to bestow. In 1875 he married Miss Murray, of Dublin, and Lady Huggins has been since then his collaborateur in the fullest sense of the word in the work with which his name is associated. Sir William, it may be added, has very kindly placed some of the most remarkable of his photographs at the disposal of *Photography and Focus*. They are reproduced on this page, with some attempt to show what can be learned from them.

First, let us glance at the two insignificant banded strips of light that we have called figure 1. Weak as is the light which reaches us from the stars, it has here been spread out by means of the spectroscope into a band or spectrum, and has been made to yield its secrets and to tell us the nature of the distant orb whence it is derived. The upper strip is the light of the brilliant bluish-white star Vega (α Lyrae) and the lower one that of the closely similar star Spica (α Virginis). These two were taken in 1875 in the very earliest days of the dry plate, and form a wonderful testimony to the powers of the plate and to the skill and patience of its user.

Let the photographer imagine that he has to photograph some object which is moving slowly past his camera, and that it requires an exposure of several hours to do so. His camera is fitted with an accurate view finder, and he has to lie down in some inconvenient posture to bring his eye near the finder, and hour after hour has got to watch and move his camera so that the object during the whole of the exposure is in exactly the same place on the finder. If he can picture himself doing this he can form some idea of what it means to get these little photographs.

Having got them it remains to read their message. What,

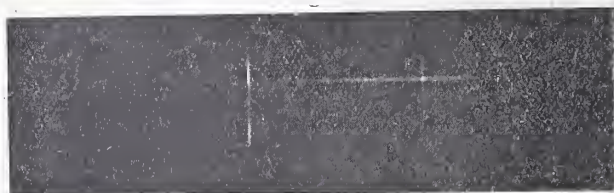


Fig. 3.—The spectrum of the Nebula of Orion. By Sir William Huggins.

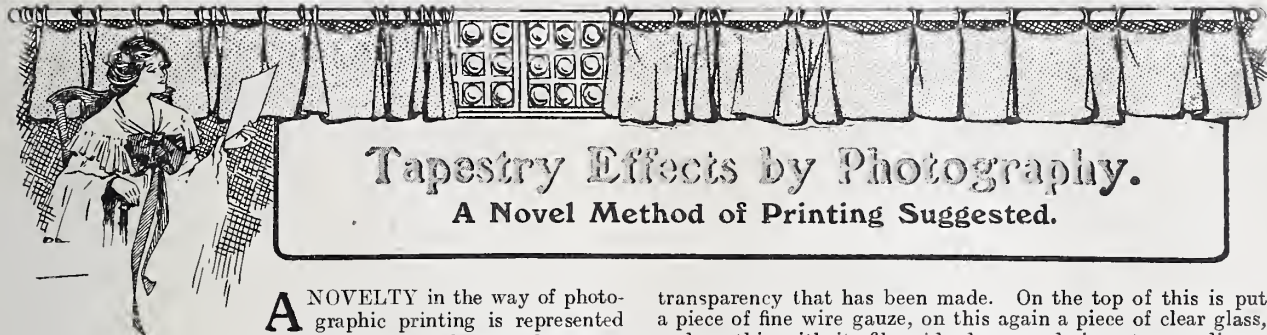
bands of light crossed by dark lines, which form figures 1 and 2. This is a mere string of bright dots, broadening out into faint lines, of which one or at the most two will be distinguishable as lines. The most conspicuous of these in the photograph can never be seen by mortal eye, though the plate sees it quickly enough. This is the spectrum of the great Orion nebula, one of the most gorgeous sights, in a large telescope, which the heavens present. Here we have its light analysed out, that it may tell us beyond all doubt of what the nebula consists.

The conspicuous difference between this and the others that we reproduce shows that in the nebula we no longer have a white hot solid body, as we have in Vega, and other stars, and as we have in the sun itself, but a vast mass of glowing gas. Hydrogen is present, and it may be that the very conspicuous line to which already reference has been made, is due to hydrogen. Its meaning is not yet fully grasped. It is, at any rate, a characteristic feature in certain spectra of nebulae.

So much for the little pictures we reproduce. Similar ones obtained by Sir William Huggins have taught us that carbon is conspicuous in comets. The carbon bands he saw in 1868, and in 1881 for the first time he photographed the spectrum of a comet revealing the presence in it of a compound of carbon and nitrogen—cyanogen. Sir William, writing us recently on the employment of photography in astronomy, said, "In recent years photography has enabled the motion of stars

in the line of sight to be determined (by the method I first practically inaugurated by eye in 1866) with great accuracy, revealing a large number of remarkable binary and multiple stellar systems."

We see, then, that in astronomy the camera has proved an invaluable aid. It has been equally serviceable in chemistry, in medicine, in biology, in physics, and in other directions, with some of which we hope to deal in the near future.



Tapestry Effects by Photography.

A Novel Method of Printing Suggested.

A NOVELTY in the way of photographic printing is represented by the two photographs reproduced on this page; and if we tell exactly how the second was made from the first, those of our readers who are tempted to try something of the same sort themselves will know how to set about it. The method is due to Gustave Michaud, of Costa Rica, and the effect desired was to get a photograph which should resemble tapestry in appearance, its picture being cut up into little squares which seemed to be in relief.

The first thing to be done is to make a positive transparency from the negative. This may be made on an ordinary plate or on a lantern plate, by enlargement or by contact. There are several ways of doing it familiar to the readers of *Photography and Focus*. This transparency should have the same dimensions as the finished "tapestry" picture.

transparency that has been made. On the top of this is put a piece of fine wire gauze, on this again a piece of clear glass, and on this with its film side downwards is put an ordinary plate, or a lantern plate if preferred. It is sometimes advis-



A portrait taken in the ordinary manner.



The same portrait with the tapestry effect.

able to omit the glass. The back of the frame is then put in, taking care that the pressure of the springs is not so great from the extra thickness in the frame, that there is any risk of smashing either positive or plate.

All is now ready to print a negative on the plate, by contact from the positive, the interposed gauze providing the tapestry effect. The light of a couple of matches will suffice for this, and they must not be burnt immediately opposite the centre of the frame, but in the direction of its diagonal. They may be about two feet from the frame, and should be moved about, so that the gauze throws a shadow, but not a sharp shadow, on the plate. The plate is then developed in the ordinary way, and a print made, which, if all has gone well, will show the tapestry effect.

The separation of the positive from the plate, and of the gauze from the plate, causes the shadows cast by the wires to cut up the image into little squares, while owing to the illumination being diagonal and not direct, the squares appear to be in relief, just as they are in tapestry work.

The negative from which our "tapestry" print is to be made is then put in hand. It, too, is made by contact on an ordinary or lantern plate. In the dark room a printing frame is placed, face downwards, on the table, and its hinged back is removed. In it, film side upwards, is placed the positive



A Simple Object Lesson in Orthochromatics.

BY DIXON HUNT. Special to "Photography and Focus."



THE beginner who has not a very clear idea of what is meant by the correct rendering of colour values in photography may find an examination of the accompanying pair of prints instructive.

Clearly, the subject is the same in each print, but what a striking difference there is in the contrasts. They cannot both be right. Let us see which one more nearly reproduces the effect as seen by the eye when examining the actual objects. Some of the flowers were white, the rest a light yellow; the background was a dark blue-slate colour. To the eye the yellow flowers stood out light and bright against a dark background, yet in the first print they appear not only much darker than the background, but almost black. In the second print they have just about the right tone, and the right amount of contrast with the background. Delicate gradations are more or less lost in reproduction, but in the original there is also a distinct difference in tone between the yellow and the white flowers.

We learn from this brief comparison that the ordinary photographic plate gives us a result like No. 1, in which yellows come out much darker and blues much lighter than the eye values them. We can improve matters very much by using an orthochromatic plate, and by placing a colour filter or screen before or behind the lens. In this case No. 1 was taken on a Wellington speedy plate with an indoor exposure of 30s. at f/16. No. 2 was on a Wellington Iso Speedy, with a five times yellow screen and an exposure of 240s. at f/16.

It is convenient to use flowers to illustrate this point, because we are familiar with their actual colours, and so

can compare the results readily, and because it is possible to keep precisely the same subject for the comparative exposures. But the same rules apply in other cases. A marked difference will be seen in spring landscapes if taken on an orthochromatic plate with a yellow screen rather than on an ordinary plate with no screen.

The whole subject is a wide and complicated one, but the beginner can see at once the advantage of an ortho plate and yellow screen in dealing with blues and yellows. He should never tolerate such a rendering as that shown in the first print, while it is so easy to obtain the truer and more harmonious effect of the second.



FROM THE CARRIAGE WINDOW.

HOW many of our readers have tried to take snap shots from the window of a railway carriage? Not many, perhaps; but it is not so very difficult, and is at least a pastime on the journey. Here is what the "Belfast News Letter" recently contained on this topic.

The writer once entered into a friendly competition with another traveller when journeying to Scotland. Both had the same make of camera, and

naturally found a subject to discuss that was interesting to both. The idea of so many excellent views being unrecorded led us to try our luck with a dozen films from either side of the carriage, changing alternately. We allowed one snap shot each in every five minutes, and arranged for the results to be submitted to a judge a few days later. The results of that competition were most instructive.

The following hints may prove interesting. In the first place it is advisable that the camera should be held at an angle of about 45° looking ahead out of the window. Care should be taken that the sun is not shining into

the lens of the camera. The camera should be held just inside the carriage window, so that the lens will not become coated with fine dust. On no account should the camera be rested on the frame of the window or the vibration of the train will leave its marks on the negative.

It should be ascertained whether a train is coming in the opposite direction or not, as the unexpected always happens and the plate may be spoiled. It should also be noticed upon which side of the train the wind is blowing, as the smoke and steam from the engine will often obliterate a very pretty picture.



QUERIES AND REPLIES



REGULATIONS.—(1) Envelopes must be marked "Query," and the "Enquiry Coupon" found elsewhere must be enclosed. (2) The full name and address in addition to a *nom-de-plume* must be given. (3) Only one question on one subject is allowed in each letter. (4) Prints may be sent for criticism, but a separate coupon must be sent with each print, and a stamped addressed envelope (not loose stamps) for their return.

Queries are dealt with in strict rotation in the order received. Only "Urgent Apparatus" queries will be dealt with by post, for which purpose a stamped envelope must be enclosed.

A.M.I.M.E. (Surbiton).—E. B. D.

PERPLEXED (Seven Kings).—The 17 and 13 have got transposed.

BEGINNER (Halstead).—Marion and Co., Soho Square, London, W.

J.F.C. (Scarborough).—William Tylar, High Street, Aston, Birmingham, supplies it.

IPSI DIXI (Chichester).—Marion and Co., Soho Square, London, W., will quote you for them.

H. S. MEDLOCK (Dulwich).—We shall be pleased to forward any letter sent to us. The only way we can suggest is to advertise. We ourselves have none to dispose of.

F. W. CLARKE (Southport). It can be done. Full particulars will be found on page 112 of "The Photographic Reference Book," price 1s. 6d., or post free from our publishers 1s. 8d.

A. JOHNSTON (Lhanbryde).—We not do not know, nor is it yet on sale here. If you watch our advertisement columns you will hear of it as soon as anything definite is known.

T.S. (Aldershot).—We have had one in use for years, and it is still in good working order. The London agents for Bausch and Lomb are A. E. Staley and Co., 19, Thavies Inn, London, E.C.

W. FORBES (Forfar).—The card sent has been glazed by being coated with gelatine and allowed to dry thoroughly. It has then been well wetted, squeezed on to a ferrotype or pulp sheet and allowed to dry just as a photograph is dried. Mere varnishing with gelatine is insufficient.

AGRICOLA (Twyford).—In addition to the portrait of the boy and snow man, the plate has been exposed three times to a view of the window from inside a room. If the lady did not do it herself, someone else has done it while it has been lying about.

B. VOS (Leamington).—Immerse it in a mixture of equal parts of five per cent. solutions of copper sulphate and potassium bromide until all trace of an image has gone; then rinse it and place it for five minutes in clean hypo and wash it for a quarter of an hour.

HEADSTONE (Strathaven).—You cannot do better than what you have been doing as far as plates are concerned; the distinctness of the lettering is a matter of selecting the best light and the best position of the camera, and these must be carefully studied on the spot.

C. L. HUNTER (Hammersmith).—Many thanks for your good wishes. There is no appliance that will do what you want; the nearest we know is the Thornton-Pickard time valve, which can be attached to the shutter. If you send us a stamped envelope, stating what it is sent for, you can have the report desired.

F. W. RICHARDSON (Dungannon).—We do not know why your backing will not dry. The sediment is nothing, it always settles if left undisturbed. After backing a plate a piece of tissue paper cut to size may be put down on it, without waiting for it to dry. We presume you are not using too much, the merest smear is sufficient.

F. B. SMITH (Plumstead).—We do not quite understand your difficulty. If the formula states, as you say it does, "Formalin forty per cent.—one ounce," it means that one fluid ounce of the commercial formalin, which is sold as being of forty per cent. strength, is to be taken. If this is not what you want please write again more fully.

J. M. LAZENBY (Whitley Bay).—We are afraid no dyeing of a film on the other side would ever compensate fully for the omission of the screen, and in any case it would involve a great loss of light. Up to the present nothing has been done in this direction as far as we know. Your letter is the first suggestion of it that we have received.

F. P. SMITH (Chatham) wants to remove the emulsion from a developed Autochrome plate without damaging the starch grain. What happens to the emulsion is of no consequence. A.—The plate is put into water for half a minute, and is then gently rubbed with the finger or with cotton-wool. If the water is slightly warmed, removal is made easier.

FIXING (Oiley).—No doubt you are thinking of the Lumière formula, potassium metabisulphite two drams, chrome alum one dram. The metabisulphite is dissolved in two ounces of cold water, and the alum in two ounces of hot water. When cold they are mixed and added to three ounces of hypo dissolved in sixteen ounces of water. It is not advisable to use such baths for prints, but they can be so used. Negatives fixed in them may be dried quickly by heat; but here again, while it can be done, it is certainly not to be recommended.

ANXIOUS (Manchester).—Tabloid M.Q. will do it. But the negatives must be right to start with.

NOVICE (Tonbridge).—The rule is always to use the largest stop that will give you a sharp picture.

TAX (Kewick).—There must be some mistake. So far as our recollection serves us we never heard of such a preparation.

WRECK.—The process is a thoroughly practical one in our opinion, but it is much too soon to talk of its permanence.

NEW READER (Queenstown).—(1) One to thirty. (2) One to thirty. (3) One to twenty, with twelve minims of a ten per cent. solution of potassium bromide to each ten ounces of developer.

S. WELMANN (Godalming).—The Gaumont Co., Chrono House, Sherwood Street, Piccadilly, W., will quote you for everything of that kind, and will send you a list of what they have in stock.

D. RAITHEY (Waltham Abbey).—It will be better to use the bath recommended by the maker of the paper that you use; but a combined bath can be made up with the materials named.

ENOTS (Grimsby).—There is nothing better or cheaper than paperhangers' canvas, which should be tightly stretched on the frame and then given two coats of brown paper. We have no record of such an article recently.

UNATTACHED (Streatham).—(a) J. B. Parnham, Chagford, Old Church Road, Chingford. (b) Gideon Clark, 101, Calbourne Road, Balham, London, S.W. Both are excellent. Why not visit each and see which you prefer?

G. B. RICK, JUN. (Consett).—You had better get "Toning Bromide Prints" by Blake Smith, price 1s. nett, or post free from our publishers 1s. 2d. We could not spare space here for directions full enough to be of service.

A. W. H. SLAUGHTER (Manor Park).—(1) We have experienced the same thing without ill effects. (2) We are afraid this is beyond us; but if it can be got, then manifestly the statement that it is impossible must be incorrect. (3) Metol, hydrokinone, metabisulphite, sulphite, and bromide. (4) Is what method correct? (5) No. (6) Probably the latter.

KLITO (Finsbury Park).—You had better throw it away, it is poor economy to risk spoiling good material by trying unknown chemicals on it. We know fifty substances that look like it. Try developing for twice as long as you have been doing, whether you think it right or not, and let us know if there is no improvement. We like Higgins's mountant.

G. W. SMITH (Purley).—The light patch in the centre is the correct part, the two edges are light fogged. The cause is light reflected from the bellows of the camera, due to the hood of the lens not being sufficient. It has nothing to do with plates or developer, and is a common enough defect. Reblacking the inside of the bellows may help to remove it.

J. NORRIS (Bolton).—There are little details in which different instruments differ in the method of their use, and we think you would do well to communicate with the makers, so that you may be quite sure the apparatus is having fair play. You will find them very willing to help. We are glad to hear *Photography* has been useful to you, and hope *Photography and Focus* will be still more so in the future.

CONCHILLAS (Uruguay).—There is no lens that will answer your purpose, but no lens is necessary. Could you not get some local workman under your supervision to make an extension piece to the camera, to carry the lens on the front, and to fasten at the back to the camera front? We have seen quite satisfactory apparatus of the kind made of cardboard. If you cannot, there is nothing for it but to send the camera to England.

G.B.T. (Canterbury).—No formulae for making carbon tissue have been published recently, and it is certainly not work for an amateur. Liesegang gave the following:

Water	1 ounce
Gelatine	120-150 grains
Soap	15 grains
Sugar	21 grains
Dry colouring matter	4 to 8 grains

A.H. (Preston).—We do not quite understand your question. The "cheapest" method is to use the apparatus you have got, which is quite suitable if it will extend far enough. This you must try for yourself. Rack out the camera as far as it will go and see how big the image then is, when it is sharp, focusing by moving the subject to and fro. If it is not large enough a temporary extension may be made of wood or cardboard, to carry the lens a few inches further from the plate.

BAYFIELD (Manchester).—A full description will be found in "Practical Enlarging," price 1s., or post free from this office 1s. 2d.

SHUTTER (Newlands).—We have no further information at present, but shall publish any as soon as we get it. It is not yet on sale.

REFLEX (Kirkdale).—We shall be glad to answer any specific question, but cannot reply to a general enquiry for "information."

G. CHALLING (Catford).—So far as we know there is no method of making it adhere. The glazed coating is usually gelatine, not celluloid.

W. H. JEFFERY (New Southgate).—(1.) Any very fast brand. (2.) One is as good as the other. (3.) See reply to 2. (4.) The factor for rodinal is 30.

H. GARTSIDE (Oldham).—The "fixed focus" method is not applicable to a half-plate camera at all. Your only plan will be to have a scale and work to that.

QUERY (Snodland).—We should think either the Aldis or the Staley Euryplan would be most likely to suit you; they are equally applicable to both purposes.

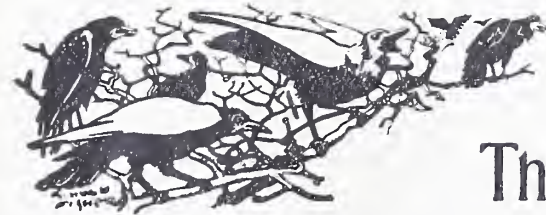
REV. R. BRYANT (Rugby).—The whole of the information to hand was published in our issue for April 22nd; but we shall be referring to the subject again very shortly.

CROYDONIAN (South Norwood).—The Croydon Camera Club should suit you. It meets close to East Croydon Station. The honorary secretary, Mr. H. M. Bennett, of Alipore, Duppas Hill, Croydon, will no doubt be glad to send you full particulars.

A. L. FRENCH (Croydon).—There is nothing for it but to send the slide to be repaired, or to repair it yourself. Under the strip which goes across one end there should be a velvet covered spring light trap, and this is evidently missing or out of order.

LEGIS (Shepherd's Bush).—The description does not enable us to recognise the make; but if you are thinking of buying it, we can only say that it is a very risky thing to purchase unknown apparatus of this character unless you are in a position to test what you are buying, and to form some idea of its value.

EAST LOOE (East Looe).—(1.) No. (2.) It would be well to write to Ozbome, Ltd., Weedington Road, Kentish Town, London, N.W., for the latest instructions. (3.) We know of none. In what way is the fact that it is patented a "practical objection"? (4.) Only for the Donisthorpe process.



The Week's Meetings.

MONDAY, MAY 11TH.

Cripplegate P.S. Rumage Sale.
Atercliffe P.S. "Home-made Apparatus."
Bedford C.C. Annual General Meeting.
Gravesend & D.P.S. "Field Work." J. T. Dalladay.

TUESDAY, MAY 12TH.

Wimbledon & D.C.C. "The Romantic In Landscape." F. C. Tilney.
Royal P.S. One-man Exhibition. Furley Lewis. A Demonstration of the Donisthorpe Process. Frank Donisthorpe.
Hackney P.S. Oil Process.
Nelson P.S. Negative Evening.

WEDNESDAY, MAY 13TH.

Lincoln A.P.S. My Experiences with a Camera. G. J. Wilkinson.
C. Tech. Coll P.S. "Toning Bromide Prints." E. Hudson Spence
South Essex C.C. "Down Along." T. Michell.
Evertown C.C. "Carbon." W. A. Hooker.
Croydon C.C. Time Development. W. F. Slater.
North Middlesex P.S. Ten Minutes' Papers.
Boro. Poly. P.S. Print Competition.
Batham C.C. Members' Night.
Bolton A.P.S. Hardcastle Crags.

THURSDAY, MAY 14TH.

Richmond C.C. General Meeting.

Societies will have their meetings announced here if the syllabus is sent to us at the beginning of the Session or from time to time.

THURSDAY, MAY 14TH (Continued).

Handsworth P.S. Wood-engraving and Electro-typing. A. E. Cope and A. A. Major.
Hackney P.S. Leigh and Benfleet.
Southend-on-Sea P.S. "Criticism of Exhibition Pictures."
L. & P.P.A. "Afar in the Farland." W. L. F. Westall.

FRIDAY, MAY 15TH

Lincoln A.P.S. My Experiences with a Camera. G. J. Wilkinson.

SATURDAY, MAY 16TH.

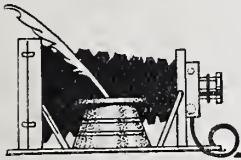
Lincoln A.P.S. Thornton Abbey.
Bowes Park & D.P.S. Outing.
Wallasey A.P.S. Dibbinsdale.
Small Heath P.S. Sutton Park.
Govan C.C. Bothwell Castle Grounds.
Chelsea & D.P.S. Greenford.
Liverpool A.P.A. Llangollen.
Halifax C.C. Cragg Vale.
Manchester A.P.S. Haigh Plantations, Wigan.
Batley & D.P.S. Hightown.

MONDAY, MAY 18TH.

Bowes Park & D.P.S. "The Wonders of the Heavens." C. P. Butler.
Oliver Goldsmith P.S. Arbrook Common.
Bradford P.S. "Baldon Moors."
Walthamstow P.S. "Nature Mounts and the Choice of Colours." T. R. Nunn.

Forthcoming Exhibitions.

SOCIETY	ENTRIES CLOSE	EXHIBITION OPENS.	NAME AND ADDRESS OF SECRETARY.
Morpeth Y.M.C.A. C.C.	May 11	May 14	H. Dixon, 30, North Place, Morpeth.
East Sussex A.C.	May 11	May 21	Miss Watson, Deverell Hurst Studio, De Chain Avenue, St. Leonards.
Bromley C.C.	June 1	June 10	T. D. Grady, Collingtree, Cambridge Road, Bromley, Kent.



The Story of a "Scoop."

A Little Bit of History by the Editor of "Photography and Focus."



SOME months ago I promised that when opportunity offered I would tell how it came about that *Photography* last year enjoyed what was undoubtedly the biggest journalistic "scoop" which the photographic press has known. It will be remembered that, while other magazines were in blissful ignorance of the Autochrome plate and of all it meant to photography and photographers, *Photography* gave full particulars of the newcomer, and was enabled to supplement these, week by week, with working details, and to lend examples of the process to dealers and to societies all over the country, to show of what the new plate was capable. The present seems to be a good opportunity for fulfilling the promise; and I am the more free to do so because, as readers will see, it was more by good fortune, backed by the enterprise of the proprietors of the paper, than by any merit of my own, that *Photography* was able to profit in so remarkable a manner by the coup.

For years we had all known about the Brothers Lumière and their attempt to make a colour plate by means of dyed starch grains, but outside the circle of the Lyons firm it is very doubtful if anybody ever thought that success was to be got on those lines. The plate had been promised so often, and withheld so often, that there was some excuse for believing that it never would appear. That was the state of things in June last, when my friend Stieglitz, who was in Paris, wrote me to say that Steichen and he had used the plate and that its possibilities were simply marvellous.

I am afraid even then I was not convinced, for I remember writing back that to talk of direct colour photography to me was like talking about perpetual motion to an engineer. However, Stieglitz did not rest there. Steichen was coming to London, and he brought with him a collection of his own work on the plate and a supply of the plates. In a bedroom at the Hotel Russell he put the whole thing before me, in a way I have already described, and finished by saying, "Now, until you go to press with your next number, I shall show these to no one who would make any journalistic use of them."

Here was an opportunity indeed.

The first thing to do was to get a supply of the plates and to use them. Steichen wanted all he had; but I managed to get a few from Paris for my first experiments. *Photography* came out with a full account of the plate, and from its columns the British photographer learnt all that the new process would do.

But a "scoop" of this sort is nothing unless followed up. Its contemporaries the next week might have come out with

something very similar; in fact, I fully expected that they would. The paper had not only got in front, it had to be kept in front, and the only way to do that was to obtain a good supply of the plates, to test and try them in every possible way, to learn all about their peculiarities, and so on, and to show what could be done on them.

Alas! the plates were unobtainable. Messrs. Lumière very kindly sent me a few from Lyons, but they were soon gone. The Paris sources of supply dried up. No plates were to be bought there at all, and half the advantages that I had hoped to get from the "scoop" seemed vanishing. Fortunately my contemporaries seemed to have come up against the same difficulty, and so they allowed *Photography* to have a monopoly of such little information as was to be got.

It was at this point, late one Thursday night, when I had sent *Photography* to press with the last fragments of news about the plate that I could get together, and wondering where any more was to be sought for the next issue, when I learnt that, while all the Autochrome plates in Paris had been bought up at once, there were probably still some on sale in provincial France. The Lumière firm seemed to have determined to treat all its French customers fairly, and so, while no dealer, not even the biggest in the capital, had had a big supply, every dealer on its books was allowed to have a few from the first. As everyone naturally went to Paris to get the plates, the Paris dealers were soon sold out, but the country dealers might have a few.

The proprietors of *Photography* determined to spare no expense to keep the paper in the very forefront in news, and plates were to be got at any cost. The case was urgent, and within two hours of getting the news I was on my way to France. The information proved to be true. I travelled from town to town, buying up all the dealers' small supply of Autochromes, until I had sufficient for all my wants, and could feel easy on that score.

Armed with a plentiful supply, the staff of *Photography* was able to familiarise itself with their use, the examples of work which were on view in over seventy provincial towns were prepared and circulated, the travelling sets of slides was got under way, and in the course of the preparation of these, all that information about the use of the plate was got together and published week by week in *Photography*, which enabled its readers to start autochroming with the best possible prospect of immediate success.

It is no exaggeration to say that, until the arrival of a regular supply of plates for the English market, more than half of those which had been brought into this country at all were bought by and at the expense of the proprietors



A "Peep" among the Bracken and the Firs (see page 8).

of *Photography* in the interests of the readers of the paper. They were not without an immediate return for their enterprise. It was recognised on all hands that *Photography* had enjoyed a most extraordinary "scoop," the sales of the paper increased rapidly, and the increase was maintained.

If I tell the tale here, in detail, it is not in boastfulness, but that my many readers, new and old, may recognise the way in which the paper has to be conducted, if it is to contain

all that its readers want to know, told when they want to know it. One thing they may take from me. The proprietors in the future, as in the past, are determined that no expense and no trouble shall stand in the way when it is a question of putting *Photography and Focus* in the forefront and keeping it there; and this is the moral which I hope will be drawn by every reader from my little story of a "scoop."



A Handy Tool for Mounting Prints.

By Easten Lee. Special to "Photography and Focus."



OW frequently one sees what would otherwise be a passable print spoiled by careless mounting. The simplest way to mount prints, of course, is to paste them by the top edge only, but this cannot be done in all cases. Even when the method of mounting is a matter of individual choice, many prefer their prints mounted in close contact all over. While at times this method must be adopted. Few seem to be able to paste anything without getting the paste on their fingers; and, if he does not exercise great care, the amateur photographer finds the final resting place of some of the paste to be on the face of the print instead of the back thereof.

The little tool, described and illustrated below, can be made in a few minutes by anyone at all handy; and, by its use, mountant may be applied and prints centred without the necessity of touching the paste with the fingers at all. To make it, there are required (1) a piece of hard wood one inch square by five and

at the other end of the print, in the position shown by dots in figure 1; the paste can then be applied to that part of the print which previously was left untouched.

The mounter may then be gently lifted up with the right

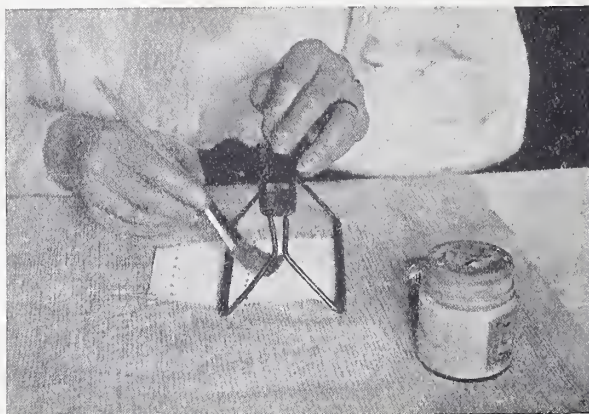


Fig. 1.

hand, the print will usually be found to adhere to it, and in this way it may be transferred to the mount, allowing the two ends of the print to fall into position against the pin pricks. The fingers of the other hand are placed on the face of the print, and the mounter is carefully drawn away. This operation is shown in figure 2. The print may then be pressed into contact with a squeegee, or in any way usual to the operator.

It will be seen that the advantages gained by using this mounter are easy and proper adjustment, clean fingers, and a

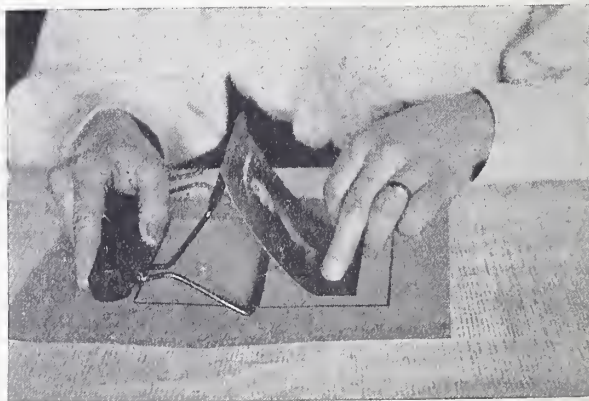
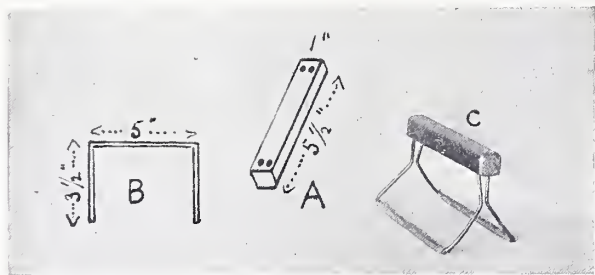


Fig. 2.

firm hold whilst applying the paste. Further, a greater number of prints can be dealt with in a given time than by the old method of using the fingers to hold the print whilst mountant is being applied.



a half inches long, (2) two strong pieces of wire twelve inches long and three-sixteenths thick, and (3) two pieces of rubber tubing five inches long, and of a diameter which will allow them to fit tightly on the wire.

Two sets of small holes are first bored on one side of the wood, each set of two holes being about a quarter of an inch from the end, and just large enough to allow the wire to be firmly fixed when it is hammered in. The wood and its holes are shown at A in the sketch. The wires are then taken and bent at right angles at three and a half inches from each end. (B in the sketch). On to the middle of each of the two wires is then slipped one of the rubber tubes, and the ends of the wires are then gently hammered into the holes previously made in the wood. The rubber covered parts of the wires are then bent out until they are about two and a half inches apart, and the little tool is complete and ready for use. It is shown at C in the sketch.

To mount a print we first mark by pin pricks on the mount the points of contact for two corners of the picture. Then, placing the print face downwards on an old newspaper, we put the rubber covered bars of the mounter over the back of the print nearest to the two corners from which the pin pricks were made (figure 1). Taking up some paste on a stiff short haired brush, we apply it to all parts of the print except those adjacent to or covered by the rubber bars. Then, pressing the brush on the print, the mounter is lifted up and replaced



THE CHOIR AISLE.
BY H. COSTELLO.

FROM THE PORTFOLIO OF
THE IBIS CAMERA CLUB.

SOME OF THE ENTRIES IN THE TRAIN COMPETITION.



HEAVY PULLING. BY J. M. TOMLINSON.

SOUTHWOLD TO HALESWORTH. BY G. S. W. COOPER.

THE SUD EXPRESS. BY MISS MORDAUNT.

A TIME SAVER (CERTIFICATE.) BY JAMES PURDON.

G.W.R. CARDIFF-LONDON EXPRESS. BY C. A. HUBBACK.

G.N.R. SHEFFIELD AND MANCHESTER EXPRESS PASSING HUNTINGDON (3RD AWARD). BY F. E. MACKAY.

The Skull and Hour Glass Title Competition.

Full List of the Awards.

OPINION seems to have differed as to the ease or difficulty of finding a title for Mr. Maddison's decidedly weird emblematical group. We have heard it said that this particular picture is the hardest of the four which have figured in the competition; on the other hand, it has been put to us that the finding of a title for it was ridiculously easy. To judge from the entries, more numerous than ever, it has not been hard; yet we looked over hundreds before we came across any that seemed to be particularly happy.

AWARDS.

THE FIVE POUND PRIZE.

The first prize of five pounds is won by Mr. W. H. Mainwaring, of Bracebridge, Lincoln, and a cheque for that amount has been sent to him. His title is "I send you here a sort of allegory."

Ten cheques, each of one pound, have been sent to the competitors whose names are given in the next column.

"Focus" Landscape

THIS competition, which closed at the end of last month, has now been judged, and those of the entries which were sent with postage for their return are being sent back. The full list of awards in the two sections A and B is as follow:

Awards in Class A.

The first prize, a half-plate National outfit by Messrs. W. Butcher and Sons, Ltd., is awarded to G. L. A. Blair, of 49, High Street, Paisley, for his picture entitled "February."

The second prize ("Focus" silver medal) is awarded to Rev. C. O. Stewart, of 12, Beech Grove, Beverley Road, Hull, for "The Path by the Trees."

The third and fourth prizes ("Focus" bronze medals) are awarded to Dan Dunlop, of Hamilton Street, Motherwell, for "Spring's Awakening"; and Wm. T. Lloyd, 4, New Albion Street, Radcliffe, Manchester, for "And to the Woods in Autumn Time—My Solitary Way."

The fifth and sixth prizes (certificates of merit) are awarded to Walter Selfe, of 70, Paragon Road, Hackney, for "A Bank of Wild Flowers"; and W. McWilliam, of 2, Portland Road, Southall, for "The Llyn Stream."

Two extra certificates of merit are awarded to G. L. A. Blair for "The Crest of the Hill" and "Westwards."

The ten extra or consolation prizes go to: Arthur Turner, 99, Carr Road, Sheffield, for "Sunshine on the Path"; Walter Selfe, 70, Paragon Road, Hackney, for "Across the Valley"; H. M. Hames, 65, West Street, Boston, Lincs., for "Woodland Shadows"; John T. Roberts, 2, New Road, Gravesend; Thomas Chester, 22, Mitella Street, Burnley, for "A Heavy Load"; J. B. Johnston, 59, Ashley Terrace, Edinburgh, for "Homewards"; A. J. Taylor, care Messrs. Lennon, Ltd., Capetown, South Africa, for "An African Landscape"; F. Whitaker, 83, West View Terrace, Keighley Road, Skipton, Yorks, for "Windswept"; Thos. Ffobson Holt, 103, Hulme Hall Lane, Miles Platting, Manchester,

H. G. N. Ashbee, Rose Valley House, Brentwood, Essex, for "Sorts and conditions of keys."

R. E. Grieves, Weston, Crewe, for "Time unlocks many mysteries."

W. M. Balshaw, Saxonhurst, Seymour Road, Bolton, for "Time's sands are run, life's journey's done."

C. H. Eden, 37, Melton Road, West Bridgford, Nottingham, for "Emblems of Philosophy."

F. Lincke, 21, Newborough Avenue, Liverpool, S., for "Dust and Rust."

Frank Harrison, 2, Moran Street, Fulwell, Sunderland, for "Silent but Eloquent."

F. A. Darrah, 30, Weld Road, Birkdale, Lancs., for "Time's musty derelicts."

James Simpson, 36, Eastbourne Avenue, Gateshead, for "The Wizard's Legacy."

John M. Sweet, 29, Freer Road, Handsworth, Birmingham, and Fred Green, 47, Wakehurst Road, Wandsworth Common, London, S.W., for "The Philosopher's Legacy."

Competition Awards.

for "Thornton Force, Ingleton"; and Herbert Mills, Higher Bank, Smithills, Bolton, for "Sunset."

Class B. For Beginners.

In this section the first prize a National postcard camera, by Messrs. W. Butcher and Sons, goes to John Gent, of 34, Haulgh View, Higher Darcie Street, Bolton, for "The River's Brink."

The second prize ("Focus" silver medal) is awarded to James Beswick, of 81, Highfield Road, Rock Ferry, Birkenhead, for "A June Landscape."

The third and fourth prizes ("Focus" bronze medals) are awarded to Miss Alice Daglish, of 5, Westfield Terrace, Scarborough, for "Sunlight and the Pines"; and to Miss E. Henshall, 120, Loughborough Road, Nottingham, for "A Landscape."

Certificates, forming the fifth and sixth awards, were granted to F. Wright, of 19, Delapole Avenue, Hull, for "The Old Mill, Hessele"; and to W. J. Sayer, of 181, High Street, Chatham, for "Seed Time."

Ten extra, or consolation prizes, have been won by J. B. Anderson, 16, Stranmills Park, Belfast, with "Sunbeams"; P. G. F. Banks, 34, Watson Street, Hartlepool, with "A Landscape"; Paul Carden, 50, Brook Street, Kennington, S.E., with "A Backwater"; W. A. Everard, 15, Gower Place, London, W.C., with "At the Edge of the Wood"; James McGill, 14, Whitehead Street, Paisley, with "The Winding Brook"; James Malley, Rose Cottage, Houghton, via Preston, with "A Woodland Path"; E. Mitchel, 50, Duke of York Street, Wakefield, with "Birch"; S. F. Shingleton, 22, Carminia Road, Balham, London, S.W., with "A Quiet Corner"; Miss Helen D. M. Stark, Rosedale, Bromborough, Cheshire, with "A Lake in the Highlands"; and George H. Throp, Tong, Bradford, Yorks, with "In a Country Lane."

Awards in the First Special Subject Competition.

Many Entries sent in by Photographers of Trains.

THE first prize, *Photography* silver plaque, is won by J. H. Spree, of 73, Warrior Square, St. Leonard's-on-Sea, Sussex, by the picture which he entitles "Onward."

Photography bronze plaque, the second award, goes to J. M. Tomlinson, of Queen's Square, Poulton-le-Fylde, Lancashire, for "Get'ing Up Speed," reproduced on page 1.

The third award, *Photography* bronze medal, is won by F. E. Mackay, of 2, Foxmore Street, Battersea Park, London,

S.W., by his print, "G.N.R. Sheffield and Manchester Express passing Huntingdon."

There have also been certificates awarded to Chas. A. Hubback, of 29, Wordsworth Avenue, Roath, Cardiff, for "G.W.R. Express, Cardiff to London"; to James Purdon, 74, Willows Crescent, Cannon Hill Park, Birmingham, for "A Time Saver"; to A. W. Cooper, 137, Friargate, Preston, for "The Scotch Express"; and to W. H. London, Egerton Cottage, Berkhamstead, Herts., for "Against a Headwind."



OUR COMPETITIONS.

PRIZES: Plaques, Medals, Books, Certificates, Cash.

BEGINNERS' PRINT COMPETITION.

Open to all photographers who have never taken an award of any kind in any other photographic competition.

PRIZES.

First Prize.—A signed copy of "The Complete Photographer," a half-guinea work by Mr. Child Bayley, now in its second edition.

Second Prize.—A free subscription to *Photography* for twelve months.

One or more certificates of honourable mention will also be awarded.

RULES.

(1) Each competitor can send as many prints as he likes, but each print must bear on the back the coupon, published each week, the name and address of the sender, the title of the picture, and no other writing whatsoever.

(2) No print will be eligible that is larger than 5½ in. × 3½ in. (postcard size) or 5 in. × 4 in.

(3) No print must be mounted.

(4) No handwork other than simple spotting is permitted on negative or print, nor shading or dodging of any kind. It is distinctly understood that entry in the competition implies a declaration by the competitor that this rule has been complied with; and in case of dispute the editor shall have the right to call for the original negative, from which the entry purports to be a simple direct contact print.

(5) No prints will be returned, and no correspondence with regard to the competition can be undertaken.

(6) The publishers of *Photography* shall have the right to reproduce, without payment, any of the prints sent in, winning or otherwise. But except the winning prints, the names of competitors of other prints that may be reproduced will not be published without the competitor's consent.

(7) All entries must be addressed "Beginners' Competition," the Editor of *Photography*, 20, Tudor Street, London, E.C., and must be delivered at that address by the first post on the closing date at the very latest.

CLOSING DATE.—Saturday, May 30th.

TITLE COMPETITION.

A fresh title competition is announced this week. The picture for which a title is wanted will be found reproduced on page xlv., where also are all the conditions of entry. The coupon is on page xlv. Entries close May 25th.

ADVANCED WORKERS' PRINT COMPETITION.

Open to all readers of *Photography* without exception.

PRIZES.

First Prize.—"Photography" Plaque in Silver.

Second Prize.—"Photography" Plaque in Bronze.

Third Prize.—"Photography" Medal in Bronze.

One or more certificates of honourable mention will also be awarded.

RULES.

(1) All photographs must be sent addressed "Advanced Competition," the Editor of *Photography*, 20, Tudor Street, London, E.C., postage paid, to reach there not later than the first post on the closing date, and must contain a stamped addressed envelope or label (not loose stamps) if they are to be returned.

(2) Each photograph must be mounted, but not framed. Prints in slip-in mounts are not eligible. Each must bear on the back the name and address of the sender and the title of the picture. No letters or other communications must be enclosed with the prints. Every print must bear attached to its mount a coupon for the competition of the month which will be found in each issue of the paper.

(3) Each photograph must be the work of the competitor as regards selection and arrangement of the subject, exposure and development of the negative, and printing, development or toning, and mounting of the print.

(4) The prints which are accompanied by stamped envelopes or labels will be criticised by post, and the editor shall have the right to reproduce any of the prints, winning or otherwise. The awards will be made a fortnight after the closing of each competition.

(5) Awards may be increased or withheld at the absolute discretion of the judge, and in all cases of dispute the decision of the editor will be final.

(6) There is no restriction as to the eligibility, except as set forth in these rules, and except that the same negative must not be used more than once in the competition. That is to say, that a print from it once submitted, all further prints, however varied, are ineligible.

(7) Neither editor nor publishers of *Photography* shall be held in any way responsible for the safety of prints, or for their return to the competitors.

(8) The sending of a print to the competition will be regarded as a declaration to the effect that it is eligible under these rules, and that the competitor agrees thereto.

CLOSING DATE.—Saturday, May 30th.

SPECIAL SUBJECT COMPETITIONS.

Open to all readers of *Photography* without exception.

PRIZES.

First Prize.—"Photography" Plaque in Silver.

Second Prize.—"Photography" Plaque in Bronze.

Third Prize.—"Photography" Medal in Bronze.

One or more certificates of honourable mention will also be awarded.

RULES.

(1) The subject of each photograph entered must be that announced for the particular competition.

(2) Each competitor can send as many prints as he likes, but each print must bear on the back the name and address of the sender, the title of the picture, and no other writing whatsoever. Each print must have attached to it a coupon for the competition of the month, which will be found in each issue of the paper.

(3) No print must be mounted. No handwork other than simple spotting is permitted on negative or print, nor shading or dodging of any kind. It is distinctly understood that entry in the

competition implies a declaration by the competitor that this rule has been complied with; and in case of dispute the editor shall have the right to call for the original negative, from which the entry purports to be a simple direct contact print.

(4) No prints will be returned, and no correspondence with regard to the competition can be undertaken.

(5) The publishers of *Photography* shall have the right to reproduce, without payment, any of the prints sent in, winning or otherwise. But except the winning prints, the names of the senders of other prints that may be reproduced will not be published without the sender's consent.

(6) All entries must be addressed "Special Subject Competition," the Editor of *Photography*, 20, Tudor Street, London, E.C., and must be delivered at that address by the first post on the closing date at the very latest.

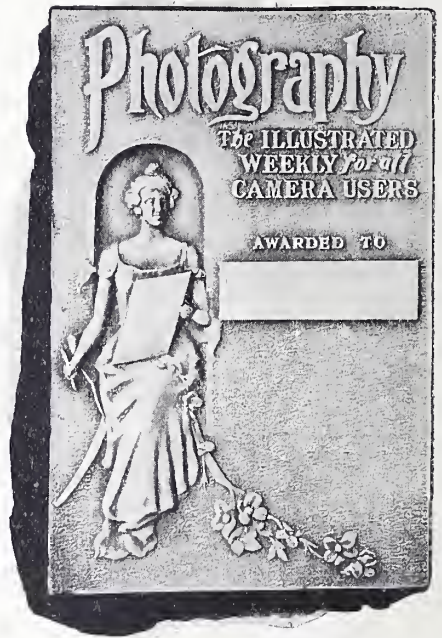
SUBJECTS AND CLOSING DATES

A Dog, Cat, or Parrot. Closes Saturday, May 30th.

A River Scene. Closes Tuesday, June 30th.



"Photography" Medal. Actual size.



"Photography" Plaque. Actual size.

Weight in silver over three ounces.

BUSINESS NOTICES.

OFFICES.—20, Tudor Street, London, E.C. Telegrams: "Cyclist, London." Telephone: 5610 and 5611, Holborn.

PUBLISHING DATE.—PHOTOGRAPHY AND Focus is on sale throughout the United Kingdom every Monday morning.

SUBSCRIPTION.—PHOTOGRAPHY AND Focus will be forwarded regularly at the following rates: GREAT BRITAIN. ABROAD.

	s.	d.		s.	d.
Twelve Months ..	6	6	Twelve Months ..	8	8
Six Months	3	3	Six Months ..	4	4
Three Months ...	1	8	Three Months ...	2	2
Single Copy	1	1	Single Copy	2	2

REMITTANCES.—Postal Orders, Cheques, etc., should be crossed and made payable to Iliffe and Sons Limited.

ADVERTISEMENTS.—All communications on advertisement matters should be addressed—The Advertisement Manager, PHOTOGRAPHY AND Focus, 20, Tudor Street, London, E.C. All copy for displayed advertisements for the issue of any particular week must reach Tudor Street by the first post on Monday morning in the week previous.

PREPAID ADVERTISEMENTS.

SALE AND EXCHANGE (for Amateurs only). —4d. per word, minimum 6d.

PROFESSIONAL AND TRADE.—Three words 2d., minimum 1/-

All advertisements to be inserted on these terms must be accompanied with remittance. To ensure insertion, letters should be posted in time to reach the offices by Wednesday morning previous to the date of publication.

BOX NUMBERS.—For the convenience of advertisers, letters may be addressed to numbers at the office of the paper. When this is desired, 2d. will be charged for registration, and three stamped and addressed envelopes must be sent for forwarding replies. Only the number will appear in the advertisement. Replies should be addressed, "No. 000, c/o PHOTOGRAPHY AND Focus, 20, Tudor Street, London, E.C."

DEPOSIT SYSTEM.—Persons who hesitate to send money to unknown persons may deal in perfect safety by availing themselves of our Deposit System. If the money be deposited with PHOTOGRAPHY AND Focus both parties are advised of this receipt, and upon intimation of the arrival and acceptance of the goods, the money is forwarded, less a charge of 1/- for registration. The time allowed for a decision after receipt of the goods is three days. For all transactions exceeding £10 in value, a deposit fee of 2s. 6d. is charged. Cheques and money orders should be made payable to the Proprietors, Messrs. Iliffe & Sons Limited, and addressed to them at Coventry.

PUBLISHING NOTICE.—Communications for the Publishers should be addressed, Iliffe & Sons Limited, 20, Tudor Street, London, E.C.

EDITORIAL NOTICES.

ADDRESS.—All communications for the Editor should be addressed: The Editor, PHOTOGRAPHY AND Focus, 20, Tudor Street, London, E.C.

TO CONTRIBUTORS.—The Editor will be glad to consider original up-to-date manuscripts on photographic subjects. All contributions must be typewritten, or in very legible handwriting, on one side of the paper only, and should bear the name and address of the sender. Letters or communications arising out of matters already appearing in the paper are not paid for. The Editor disclaims legal responsibility for the safety of matter submitted to him, but he will endeavour to return rejected manuscripts, etc., when a stamped addressed envelope is enclosed for that purpose. No notice whatever can be paid to communications without the name and address of the sender, not necessarily for publication.

PRINTS FOR CRITICISM.—Readers sending prints for criticism or advice are notified that in all cases it is understood that by so doing permission is given for their reproduction, without fee, in PHOTOGRAPHY AND Focus.

PRINTS FOR REPRODUCTION.—Reproduction fees are only paid by arrangement beforehand. The sending of a print, without any condition stated, will be taken as permission to reproduce it without fee. The Editor will be glad to consider for publication, with or without letterpress, photographs of special interest, on terms to be arranged.

PAYMENTS.—Articles and illustrations are paid for on acceptance.

INTERVIEWS.—The Editor will be at 20, Tudor Street, on Wednesdays, between the hours of 2 p.m. and 5 p.m., but can only be seen at other times by appointment.



THE BRISTOL PHOTOGRAPHIC CLUB has appointed Mr. T. C. Pearse, of 38, Queen Square, Bristol, honorary secretary. He will be assisted by Mr. F. C. Senington.

THE SURREY PHOTOGRAPHIC SURVEY has a whole-plate camera, which may be borrowed by members for survey work.

THE SHEFFIELD PHOTOGRAPHIC SOCIETY. Mr. James W. Wright, the honorary secretary, asks us to note that his address is now 30, Oakhill Road, Nether Edge, Sheffield.

THE POSTAL PHOTOGRAPHIC Co., of Rotherham, sends us copies of unsolicited testimonials to the efficiency and the satisfactory character of its service.

WIRELESS PHOTOGRAPHY.

AN apparatus by which it was claimed that photographs could be transmitted by wireless telegraphy was shown by its inventor, Mr. Knudsen, to a number of representatives of the press last week, at the Hotel Cecil.

The photograph to be transmitted takes the form of a carbon print on which fine dust is scattered, so as to give a rough surface to those parts where there is most gelatine to which the dust can adhere. The print, which may be on metal, glass, or any smooth surface, is then placed upon the table of the transmitter, and carried backwards and forwards under a stylus, by which the aerial waves are transmitted to the receiving apparatus. This is provided with a similar table carrying a smoked glass on which a stylus presses, actuated in its turn by the aerial impulses.

The tables are propelled by clock-work, but the transmitting table is automatically stopped at the end of each stroke and then started again, the receiving table being similarly stopped until it is started by a current from the aerial. In this way the synchrony of the two machines is checked at every stroke.

The "starting" coherer is of the ordinary type, but that which controls the recording stylus is said to be novel, and of greatly increased sensitivity.

No photographs were actually transmitted at the demonstration, but a portrait of H.M. The King was shown, about 5 by 3½, which it was said was transmitted in twelve minutes, the lines being sixty to the inch.

CHANGE OF ADDRESS. Messrs. Cadett and Neall, Ltd., advise us of their departure from Ashted, and that all communications should in future be addressed to them at Wealdstone, Middlesex, where they have installed themselves in new and extensive factories, fitted with the most up-to-date machinery and appliances for the manufacture of the well-known plates and papers associated with their name. Their new telephone number is 17 Harrow.

THE PHOTOGRAPHER: "You must look pleasant. Think of something nice. Think of your wife." Mr. Hicks: "I've just been divorced." The Photographer: "Well, er—er—then think of the divorce."—"Bulletin of Photography."

ENLARGED NEGATIVES DIRECT.

THE following method of making enlarged negatives direct on thin bromide paper, from small negatives, without the aid of a transparency, was demonstrated at the Thornton Heath Photographic Society by Mr. W. Wood.

An enlargement was made and developed for three minutes in

Water	... ..	1 ounce
Amidol	... ..	5 grains
Potassium sulphite	... ..	24 grains
Potassium bromide	... ..	(ten per cent.)
	... ..	3 minims

The test exposure was judged by transmitted light, and the exposure which gave the high lights slightly veiled was selected as correct. The need of prolonged development was that all the bromide which had been acted upon by the light should be reduced.

After development and washing, the print was bleached in

Water	... ..	10 ounces
Potassium bichromate	... ..	150 grains
Nitric acid	... ..	1 drachm

It was left in this until the strongest shadows only were visible as a faint yellow. The next stage, the washing out of this solution, could be done by water alone, but was then a very long process. The following bath clears the film or paper in five minutes:

Water	... ..	1 ounce
Sodium sulphite	... ..	200 grains
Potassium metabisulphite	... ..	10 grains

A thorough wash removes the last traces of this solution, and the bleached print is then immersed in the first solution again (the amidol developer).

The unaltered silver bromide develops up in this, giving a negative containing all the gradations of the original. Development should be prolonged for from ten to fifteen minutes to secure sufficient density, and the paper is then fixed as usual in hypo, washed and dried. After bleaching all the operations may be conducted in white light. Before the final development it is necessary to expose the print to incandescent light for one minute four or five inches away.

THE CAMERA CONSTRUCTION Co., of Eagle Works, Durham Grove, Hackney, London, N.E., sends us a price list of its field camera outfits.

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THE RAJAR CAMERA offered for the best print on Rajar P.O.P. has been awarded to F. Bever, of 8, Victoria Road, Callowland, Watford. The paper was purchased from the Postal Photo Co., Rotherham.

× × × ×

A PROFESSIONAL SHOWROOM is now open at the Kingsway premises of Messrs. John J. Griffin and Sons, Ltd. A mercury vapour printing lamp is on view, and Messrs. Griffin inform us that they have made a study of the most modern electric installations and studio appliances.

× × × ×

MAKING SNOW FLAKES. A simple method of getting the appearance of falling snow in portrait work is described in a letter from a reader, Mr. Louis F. Ford, of Salford. "After trying various means without success," writes Mr. Ford, "I thought of the following: I first rubbed a little gum on the glass side of the negative and then grated nutmeg over it, and I think you will agree with me that the effect is good, although on showing it to a friend of mine he quietly asked what all the spots were about (he evidently thought it a 'frost'). The nutmeg method certainly seems to have given a very successful rendering of snow."

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IN WORKING CARBOGRAPH, said Mr. Jackson, at the Chelsea Photographic Society recently, a soft negative, such as is most suitable for a bromide enlargement, is to be preferred, although one can modify the results very greatly when making Carbo-graph prints whether by contact or enlarging.

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RODINAL FOR BROMIDE PAPER. A German writer states that ninety minims of rodinal and seventy-five minims of a saturated solution of potassium carbonate, with thirty-two ounces of water, make a developer for bromide paper which yields prints of a rich warm black colour.

PHOTOGRAPHIC SOULS.

DOCTOR BARADUC, of Paris, has been telling the special representative of the "Morning Advertiser" that under special conditions the soul or astral body, the impalpable invisible double of each human being, can be photographed.

He had been experimenting on his deceased relatives, and reported the results.

"I was able," said the Doctor, "to photograph the astral body which escaped from the coffin of my son eighty hours after death. When my wife died I made the same experiment. I photographed the nebulous globe which escaped from her like a soul. You see there are forces of this world and forces of the other world."

IT WOULD BE FAR BETTER if the ambition of the pictorial amateur were encouraged in the direction of true art, and that it should not waste its energies in the by-ways and backwaters of anecdote and sentiment, seeking inspirations in well-worn titles borrowed from old "Academy" catalogues.—Orexis in the "County Gentleman."

× × × ×

BLUE TONES ON P.O.P. PRINTS. With reference to the note on this subject published in *Focus*, April 29th, page 401, by Donald Smith, Mr. Smith now writes saying that with a slightly weaker bath, and with just enough acid to make the solution work, some prints do not lose strength at all in the toning process. He also finds that if the blue tone is uneven or weak, a few moments in an ordinary hypo bath will even it up, and strengthen the tone considerably. The hypo will also eliminate any blue stain remaining in the high lights.

× × × ×

ENLARGING AND DARK ROOMS FOR MEMBERS. The president announced at the annual dinner of the Bowes Park and District Photographic Society that the committee had secured a suite of rooms as headquarters, which will be equipped with a lantern and all the necessary enlarging and darkroom accessories as soon as possible. They would be available for members by the end of June. North London photographers who are interested should write to Mr. H. A. Miles, of 3, Barrowell Villas, Green Lanes, Palmers Green, N., for particulars of this enterprising society.

ALBUMEN IN GUM PRINTING.

WRITING in the "Journal of the Photographic Society of Philadelphia," Mr. John Bartlett points out that albumen, plain white of egg, added to the mixture of gum and bichromate in gum printing, keeps the whites clear and more brilliant.

Double salt of chromate of potassium and ammonium is made by taking a cold saturated solution of potassium bichromate and adding thereto ammonia until it turns litmus faintly blue. The amount of ammonia necessary to effect this is small, so one must be cautious in adding it; but if the limit be exceeded, a little more bichromate solution can be added to make matters right.

This is a solution of the double salt, and is employed with the other ingredients as follows:

Solution of the double salt prepared as above	230 minims
Ten per cent. solution of copper sulphate ...	45 minims
Powdered gum arabic	75 grains
White of egg beaten up and allowed to subside	60 minims
Glycerine	15 minims
Pigment	as required

The mixture is made up in the way usual with gum printers, and development is carried out with cold water.

ABOUT TRIPODS.

THE tripod, while it is strong and rigid, may also be comparatively light and portable. Some four-fold stands are well fitted to go into a bag conveniently, says "Camera" in the "Glasgow Evening Times," but in use are shaky and unreliable, as on a windy day it is never a matter of certainty that a picture is secured free from movement.

Another point that is overlooked in the selection of the stand at times is that if the photographer is a good medium height, or above the average, he may unknowingly get a tripod that is much too small. Such a stand will in practice be found most inconvenient in use, as the photographer will be compelled to stoop at every exposure when focussing, where a stand that was of the proper height would allow all to be done in comfort instead of discomfort.

It may be added that when pictorial work is intended to be done, all apparatus that is inconvenient in use should be avoided.

A good strong ash stand fulfilling all these requirements can be more readily got now than ever before, but the photographer will require to know what he wants, and see that he gets it.

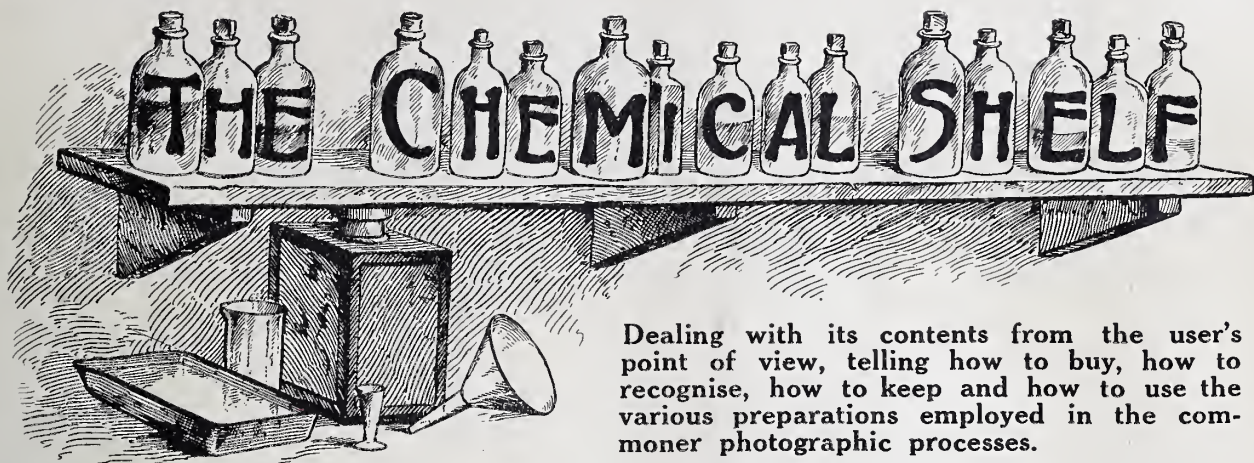
MARKINGS ON NEGATIVES.

SOME prints showing very strange markings, which were on the negatives, have recently been sent to us by Mr. A. H. Robbins, of Malvern Link. As Mr. Robbins has solved the mystery of their appearance, he gives us particulars of it, in case any other reader of *Photography and Focus* may be in similar trouble.

The camera was one of a standard and justly popular make, and was fitted with a metal diaphragm shutter of the usual type. "Suddenly," writes Mr. Robbins, "it developed a bad temper, and nearly every plate I developed had peculiar faults, the plates appearing much fogged, and the prints having dark patches across them. I showed the prints to members of my club, but they could not account for the marks."

"To test the shutter, I made some trial exposures, with a tube of black paper one inch long in front of the lens. I thought the light might be striking the front of the lens, as I noticed that the fault was worse when the sun was right overhead. From the tests I came to the conclusion that light must get into the shutter otherwise than through the lens. I therefore unscrewed the lenses, and by holding the shutter up to a strong incandescent light, found that small streaks of light made their way into the centre of the shutter through the slot of the indicator of the iris diaphragm at the bottom of the shutter, the light being reflected by the brasswork of the camera under the shutter."

"I reported the matter to the makers of the camera, and they very kindly exchanged the shutter for me, and now all is in working order again."



Dealing with its contents from the user's point of view, telling how to buy, how to recognise, how to keep and how to use the various preparations employed in the commoner photographic processes.

GUM DAMMAR.

Gum dammar is a yellowish white resin, which is freely soluble in benzine, and in this form makes a varnish for negatives and lantern slides, which will dry glossy without heat. Dammar varnish is not so good a protection as the celluloid or shellac varnishes generally employed, however. It has latterly come into use for Autochromes, to which varnishes containing spirit cannot be applied.

Dammar varnish is easily made by half filling a bottle with the gum, and then pouring in benzine, nearly to the top of the bottle, corking and shaking. It is well to put it aside for a day or two with occasional shaking. It is then carefully decanted off any sediment, which will consist of impurities from the gum, diluted to suit the convenience of the user, and filtered through a tuft of cotton-wool. An ounce of the gum to ten ounces of pure benzol gives a convenient strength for use.

HYDRAMINE.

Hydramine is a developer introduced in 1899 by Messrs. Lumière. It takes the form of flaky white crystals, which are readily soluble and keep well in solution. As only the Lumière make is on the market, there will be no trouble on the ground of impurity.

Hydramine does not stain the fingers, and is very energetic. It does not work well with ordinary alkalies or carbonates, but with caustic lithia or with formosulphite it makes an excellent developer.

FORMULA (LUMIERE'S).

Water	...	...	20 ounces
Formosulphite	...	...	700 grains
Hydramine	...	...	40 "
Potassium bromide (10% solution)	...	...	100 minims

This developer is used undiluted.

HYDROGEN PEROXIDE.

Hydrogen peroxide is a gas, which is sold dissolved either in water or in ether. For most purposes the solution in water, which is sold by chemists as "ten volume" or "twenty volume" solution, will do. It is little used in photography.

A mixture of one part of the "twenty volume" or two parts of the "ten volume" hydrogen peroxide solution with five parts of water has been suggested as a hypo eliminator for negatives, but Chapman Jones has shown that it is not satisfactory for this purpose.

A series of processes known as "catatype" were recently worked out in Germany, involving in some cases the use of a solution of hydrogen peroxide in ether or in water, but they are not yet at the commercial stage.

HYDROKINONE.

Hydrokinone, sometimes called hydroquinone or quinol, is a developer introduced twenty-eight years ago by Abney. It is usually in the form of small white needle-like crystals, and when bought from a reliable dealer is sure to be in good condition for photography. In the dry state it keeps perfectly, but in solution it soon deteriorates.

Hydrokinone is not very popular as a developer when used by itself, as it is slow in its action, and requires caustic alkali

to make it work easily. This is bad for the gelatine of the plate, and leads to frilling. But, with metol, hydrokinone forms a very satisfactory developer, and is most extensively used. All plates and papers developed with solutions containing hydrokinone should be washed, or at least rinsed, between development and fixing; or an acid fixing bath should be used. If not, there is a risk of a yellow discoloration being formed, which no after-treatment will remove.

There are many formulæ for hydrokinone, but a few must suffice. There are no special precautions to be used in making up any of these, except that the ingredients should be dissolved in the order named. A plain hydrokinone developer, it may be pointed out, is very susceptible to changes of temperature. A degree of cold, which makes no difference to other developers, may cause hydrokinone to cease to act entirely. This does not apply to metol-hydrokinone—a combination often spoken of as "M.Q."

FORMULÆ.

Hydrokinone-Caustic Soda Developer.

A.			
Hydrokinone	...	...	80 grains
Sodium sulphite (crystals)	...	...	480 "
Citric acid	...	...	30 "
Water to	...	...	10 ounces
B.			
Caustic soda	...	...	80 grains
Water to	...	...	10 ounces

For use, one part each of A and B is taken and two parts of water added.

Metol-Hydrokinone Developer for Plates.

A.—Metol			
Metol	...	...	40 grains
Hydrokinone	...	...	50 "
Sodium sulphite (crystals)	...	...	120 "
Potassium bromide	...	...	15 "
Water to	...	...	20 ounces
B.—Caustic potash			
Caustic potash	...	...	180 ounces
Water to	...	...	20 "

This is known as the Imperial Co.'s "Universal" developer. Equal parts of A and B are mixed for use.

Metol-Hydrokinone for Gaslight Papers.

Metol	...	...	10 grains
Hydrokinone	...	...	30 "
Sodium sulphite	...	...	350 "
Sodium carbonate	...	...	350 "
Potassium bromide	...	...	3 "
Water to	...	...	10 ounces

This is the Wellington formula for "S.C.P." The developer is used, just as given, for blue-black tones, or may be diluted with an equal bulk of water for softer results. This developer keeps very well in well-stoppered or well-corked bottles.

Metol-Hydrokinone for Bromide Paper.

Metol	...	...	50 grain
Hydrokinone	...	...	15 "
Sodium sulphite	...	...	480 "
Sodium carbonate	...	...	480 "
Potassium bromide	...	...	3 "
Water to	...	...	20 ounces



"The time has come, the Walrus said, to talk of many things."

THE photographer who never goes outside the British Isles naturally labours under restrictions as far as his subjects are concerned. He has Haddon Hall, and the Forth Bridge, and his mother-in-law, and the last load, and the haunt of the kingfisher, *et hoc genus omne*; but there are other things partially or entirely beyond his ken. One of these is the Aurora Borealis. You can't claw hold of the Aurora like you can of a wart-hog and put it into a cage at the Zoological Gardens; and you can't stick a pin through it like a butterfly in a museum drawer. It simply wobbles about in the Northern sky, and if you happen to be around there you see it; and if not you don't.

* * *

Of course, some will say that the Aurora *can* be seen in these islands, but, as a matter of fact, we never see more than the bare ragged edge of it. I remember, as a very small boy indeed being lugged out of bed one winter night to see the Aurora. I didn't know what the Aurora was, and I couldn't see anything, but I said I could, so that I could get back to bed.

* * *

I have seen many paintings of the Aurora, and I must admit that the artists have not spared their colours in trying to do it justice, but I do not remember to have seen a photograph of the Northern streamers. In fact, I am led to doubt whether any such photograph existed until recently, and it is only from a column in a Vancouver daily paper that I learn that at last there has arisen a man who has succeeded where others failed, and that a new figure will henceforth appear in the Temple of Fame in the person of "Jerry Doody, nature artist of Dawson, who has risen above the snow-rifts of obscurity in golden Klondike." I haven't the least idea what the Vancouver paper means by the "snow-rifts of obscurity," but I take off my hat to Jerry Doody, in spite of my ignorance, and in spite of his name. It is not overwhelmingly easy to be deferential to anyone named Jerry Doody, is it? But who can withhold some amount of worship when, as the paper says, "with the skill of the prestidigitator, Jerry has stolen the vacillating beauty of the Aurora from the heavens." I suspect that by "prestidigitator" the Vancouver paper means "prestidigitator," but one can overlook these small lapses in the contemplation of an achievement that has placed Jerry Doody on a level with Prometheus.

* * *

Now you must know that J. Doody, Esq., has put in ten years of photographic work in the Yukon, but it does not follow that because J. D. happens to live where the wild Aurora plays all he had to do was to walk out one fine night and photograph it. The Aurora is one of the most elusive animals in creation. Jerry had made hundreds of shots at it, and missed it every time. At last there came one particular night when the conditions were so absolutely favourable that even a photographic editor might have succeeded in getting a good result. "The atmosphere was clear as crystal, and the sky as blue as an inverted bowl of limpid sapphire." The Aurora had got over its moults, and was in fine feather. It spread itself around in a great bow with Dawson City right bang in the middle.

* * *

And Jerry Doody was in bed.

* * *

Asleep.

* * *

It looked as if he was bound to miss the chance of a lifetime. But it so happened that a friend of Doody's was returning home from a social, and it slowly dawned upon this friend that the celestial fireworks he saw were real. They were actually there. The Aurora Borealis was abroad in full war paint—and Jerry Doody was asleep. But in less

than no time Jerry was awake—hauled from his bunk by the friend whose head was simply humming with a mixture of social and Aurora; "and for the hundred and fiftieth time this winter Jerry plodded up the hill back of Dawson, and squared his great lens toward the pyrotechnics." I fear, dear reader, that not one of us, with all our photographic exploits, has ever presented such a heroic figure as that of Jerry Doody, on the hill back of Dawson, squaring his great lens at the Aurora. I have compared him to Prometheus; I now hasten to acknowledge his resemblance to Ajax.

* * *

It is a comfort to know that the result was a success. As the Vancouver paper truly observes, "it is a rare capture." The good old Aurora Borealis was caught at last. Taking advantage of the peaceful slumbers of its persistent hunter, Jerry Doody, it danced recklessly forth over Dawson city and mocked the recumbent camera and its owner. And, lo, ere it could draw in its prismatic horns there was the great lens of Doody squared at it from the hill back of Dawson.

* * *

In spite of much meditation I cannot quite grip the meaning of the Vancouver paper when it remarks that "this picture probably will reach the realisation of more cheechacos than any other as to what should be the real aspect of a sub-Arctic town at night." Who, what, or where, are cheechacos?

* * *

It seems that, after all, this is Jerry's second Aurora. He captured another some years ago. He now has a pair; and there is no telling but what he may now raise a family of little Auroræ.

* * *

Mr. Doody cannot be expected to go round selling these photographs himself. His place is clearly in Dawson city with a constant eye on the giddy Aurora. So we read that "Mort Craig is promoting both the pictures and they have an extensive sale in outside cities, at fairs and elsewhere." I wish Mort Craig would promote a pair to me. I wouldn't ask for them in this pointed manner, but it has never been my good fortune at fairs or elsewhere to come across Mort Craig promoting Jerry Doody's Auroræ. Nevertheless, I can see him doing it. "In my mind's eye, Horatio." I figure him standing up in a buggy, waving aloft a carefully sealed envelope. "Boys," says he, "I have right here the only genuine and original pictures of the good old Hoar-roarer Bow-ree-hay-lis. They was took by Jerry Doody, nature artist of Dawson. They actooally depict the fleecy curtains of the hyperborean heavens. Depicted by J. Doody. Get on to 'em. Get on right here and now. They are great. A thousand dollars would be real mean and low for 'em, but I don't ask it. Anybody offerin' ten cents captures the bundle. Plank down ten cents and you appropriate Doody's masterpieces. Bully for you, boy! Pass the nickels. Them pair of Auroras is yours."

THE WALRUS.

SUBSCRIPTIONS.

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PHOTOGRAPHY

A JOURNAL FOR EVERY CAMERA USER.

EDITED BY R. CHILD BAYLEY.

PUBLISHED WEEKLY.

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UNLIGHT AND THE PINES.

Awarded a bronze medal in the "Focus" Landscape Competition. Class B.

BY ALICE DAGLISH.



An Article by Mr. Sutcliffe.

We are pleased to be able to include amongst our articles this week one from the facile pen of Mr. F. M. Sutcliffe of Whitby. Mr. Sutcliffe was an editorial contributor to *Photography* in its very earliest days, and he will, we are sure, be welcomed by the readers of *Photography and Focus*. He has lately been writing the photographic article in the "Yorkshire Weekly Post." As was well put to us the other day, he is always fresh and interesting. "You never know what Sutcliffe is going to say next, and he is always worth reading to find out," said a keen critic of photographic writing to us, "whereas with many scribes their name at the top of the column is quite enough."

Colour with Self-toning Papers.

It has been pointed out times without number that the most important factor in getting good tones on P.O.P. is the character of the negative. What is not so well known, perhaps, is that this is equally important in the case of self-toning papers. It is impossible to get a good purple-black print from a poor washed-out negative. That the photographer soon learns. But one may go much further than that, and point out that negatives which will give good warm-toned prints on a self-toning paper may not have sufficient vigour to yield colder or more purple results on the same paper. The tone is not merely a matter of the length of time the print is in the hypo. To get the more purple colours it must be left in longer, it is true; but it must also have sufficient vigour to withstand the extra long immersion without becoming unduly weak. That means that the negative must be stronger and the printing must be carried deeper.

Photography in Greater Britain.

Next week's issue of *Photography and Focus* will be of exceptional interest. It will contain a full list of the awards in the "Greater Britain" competition which was organised by *Photography* last winter for its many readers overseas. A number of the winning pictures will be reproduced, and will serve to show

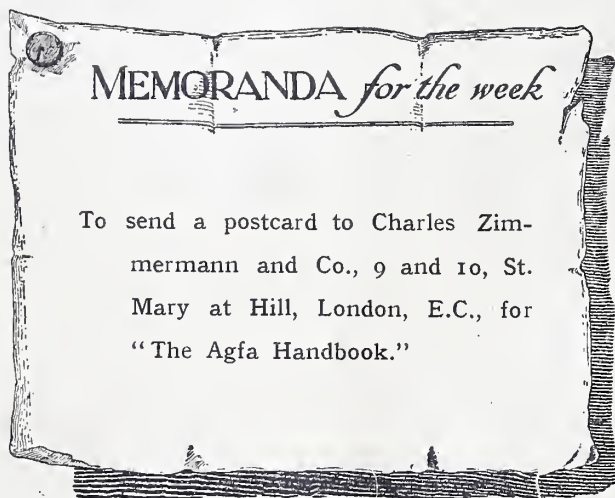
photographers in this country how widely different are the conditions under which many of their fellow workers labour. We shall reproduce, amongst others, three series of illustrations showing respectively native models, "Greater Britain" landscapes, and "Greater Britain" portrait work. The Victoria Falls and a Chinese waterfall of great beauty will also figure amongst the illustrations of a number which in its world-wide interest will be unique in photographic journalism. There is hardly a country outside Europe that was not represented in the competition.

Facing the Sun.

There is a sound rule which tells the photographer not to turn his lens towards the sun in taking a landscape. Like a great many more sound rules, it is not to be adhered to too closely. The beginner cannot do better than stick to it if he would avoid failure; but there may come a time when he will understand that some of the most striking and successful

effects are to be obtained "in the eye of the sun," and will know, too, how to avoid, or at least to minimise, the troubles which facing the sun entails.

Those troubles are twofold. When the sun shines directly in or on the lens there is bound to be a great deal of stray light in the camera. This may be spread over the whole image, causing a general degradation or fog, or it may be concentrated in one or more circular patches known as flare spots. The best of lenses will yield flare under severe conditions such as this, and all that can be done is to try and dodge the defect. If a stand camera is being used the flare spot can generally be seen on the ground glass, and may be cut off by a little arrangement. This can often be effected by a stick or two laid along the top of the camera so as to project beyond the lens, and act as a support for the focussing cloth, which will then act as a hood. The cloth can be adjusted so that it just cuts off the sun without encroaching on the picture itself. When a hand camera is in use, and there is no chance of seeing the actual effect on the ground glass, all that can be done is to give the lens as much protection as we can.



and trust to luck. A branch of a tree, a mast, a friend's hand may each serve to shade just the lens itself; but better still is a hood made of a piece of black paper rolled round the lens, and kept in position with an elastic band. So long as the direct sunshine does not strike the lens itself the trouble will not be great.

There is another difficulty in such work that must not be overlooked; it is that of under-exposure and under-development. Turning the camera towards the sun means that the lens is facing the deepest shadows. The photographer must not be misled by the glare of light in the finder. That aspect is actually the darkest he can find from a given standpoint. Then, again, the effects are often due to the most delicate differences of light and shade, implying that the development must be full if they are to have full printing value. Ample exposure and full development are the secrets of success in getting effects of this kind, then. We advise our readers who have passed their photographic novitiate to be on the look-out for subjects that are to be got while facing the sun.

THE NOVICE.

Who fills the dealer's heart with glee?
Who buys the bottles A and B?
Who prints on polished P.O.P.?
The novice.

Who uses plates up by the score,
A box a time, and asks for more?
Who writes to editors galore?
The novice.

Who is it gets his lines askew?
Who is it takes the old stock view?
Who is it tries each process new?
The novice.

Who gives "one-hundredth" every time,
And snaps with confidence sublime?
Who is it that inspires this rhyme?
The novice.

Kinematograph Pictures in Colour.

We gather from a note to hand just as we go to press that our paragraph on this subject last week is open to misconstruction. The kinematograph pictures in colour which Mr. Albert Smith has been so successful in obtaining are got by a two-colour and not a three-colour method. The principle involved is the same, of course, but by thus avoiding the necessity for the use of a red light filter the exposure difficulty, though still great, is at least reduced.

Evening Rambles.

Now that the summer is approaching photographic societies are holding fewer evening meetings, and in their stead outings figure largely on the list of fixtures. Some of the societies out of London—the Lancashire and Yorkshire clubs chiefly, we believe—arrange some evening rambles as well as the ordinary half-day outings. These do not figure to any extent on the syllabus of any of the London societies, though why

this should be so we cannot say. There seems to be no reason why evening outings should not be as successful in the Metropolis as in Yorkshire. Some of the suburban societies meet within easy walking distance of fine districts for evening work. As is well known, it is when the sun has got low on the horizon that the best work of the day is often done, and when sunset does not take place until 7.30 or 8 p.m. there should be plenty of opportunity for work after members have left their business for the day. But perhaps it is that Londoners work so hard that they have no energy left for evening photography. Perhaps. Also perhaps not.

Our Competitions.

We cannot find space to repeat every week the particulars of the competitions which we arrange for the readers of *Photography and Focus*. These were given in full on page 20 last week, and will be published again next week. In the meantime may we remind our readers that there are three competitions closing at the end of the month—one for advanced workers, one for beginners, and one with a set subject, in this case a "dog, cat, or parrot" (prints of dogs, cats, or parrots, in the plural, will be eligible).

£5 10s. for a Title for a Picture.

The total sum distributed in the last title competition was no less than £16 10s., so that the winner of the first prize received £5 10s. for his suggestion for a title, and eleven other readers received £1 each. The picture for which a title is now required is on page xxxiv. this week, and the coupon is on page viii. Entries close on Monday next, May 25th.

Symmetrical Pictures.

In looking through a number of architectural photographs sent in to a recent competition, we could not help being struck by the large number in which the camera had been placed exactly opposite the centre of the object to be photographed, and a perfectly symmetrical picture of it had been obtained. The middle of the centre aisle seemed to be the view point generally selected for the interior; while doorways and detail of that sort were portrayed like an architect's elevation.

Now, for many purposes, this is the correct thing to do. It will undoubtedly give a more generally useful record of the subject than would be obtained from any other position. But when our object is no longer to obtain a bare record, but to do work which shall have pictorial merits of its own, then the strict symmetry and balance of a picture of this type puts it out of court. As a rule, the general view of an interior does not make any pictorial claim on its own account. It is only when some corner, some transverse aspect, some happily selected combination of columns and arches and tracery has been chosen that the photograph may be said to afford scope for pictorial treatment. And, of course, in a competition where the criterion is a pictorial one, anything else cannot stand a chance, however good it may be technically.

That old camera can be sold through a small advertisement in "Photography and Focus." It costs 1d. per word (minimum 9d).



Drying Glass & Film Negatives.

How to avoid Defects in Drying, and how to hurry it up.

THE negative, as it is taken from the dish or tank in which it has been washed, is generally regarded as finished. Yet it has still to be dried; and even in this comparatively simple operation there is ample opportunity for spoiling it irretrievably. A negative while it is being dried is,

in fact, in its most delicate condition, and is open to attacks from quarters to some of which at least it is not exposed while in the wet stage.

It may not be time altogether wasted if we start by noting what is to be done if the wet negative is to be dried without injury. The drying must be rapid, as wet gelatine is prone to decompose, and we have already seen that its wet condition is a dangerous condition. It must be uniform in its action, as drying tends to alter the density of the image, and if a negative is partly dried very quickly, and the rest is dried very slowly, the two parts will differ in density. We shall have what is called a "drying mark," which is practically incurable, and will show in every print that is made. It must not be carried out by heat, or the gelatine may melt; nor must it be done in dusty air.

Now, how are these conditions best complied with? In this country, at least, there is no more satisfactory method than by putting the negative in a current of air. Summer or winter, wet weather or dry, if a current of air at the ordinary temperature of the day is allowed to pass over the surface of the film, in a few hours it will be found to have dried evenly and thoroughly. What could be simpler?

To ensure freedom from dust, the plates should be either almost or quite vertical, or the gelatine side should be slightly inclined downwards. Special racks are made in which this last position is effected, but it can be easily arranged without. If two long French nails are driven into a board or wall, three inches apart in a horizontal line, the nails being left sticking out for an inch and a half from the wall, a plate may be placed on them diamond-wise, film to the wall, with its top corner resting against the wall, the edges which rest on the nails being as far from the wall as possible, and kept from slipping off by the nail heads. A boarded, varnished wall provided with such nails is an excellent arrangement for drying negatives. The ordinary racks which hold plates vertical are very convenient, but the woodwork often extends so far as to interfere seriously with the current of air that should pass between the plates, and the grooves are far closer together than need be. The negatives should be at least an

inch or more apart, if they are to dry quickly. Negatives dry quickest when face upwards, but the position is so dangerous that it should never be adopted.

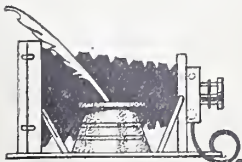
If a wet negative is stood up on a dusty shelf or table to dry, it will be found that some of the dust actually floats up on the moisture, and the lower half-inch or so of the negative will be very dusty when dry.

The foregoing methods are the best for all ordinary work, but it sometimes happens that a negative has to be dried in a very great hurry, and some other plan must be followed. None of these quick-drying methods should be used, however, unless absolutely necessary, as they invariably leave the negatives less clean and free from spots than ordinary spontaneous drying. Negatives on celluloid film cannot be hurried by heat or in any other way, and if they are to be dried quickly, all that can be done is to pass a squeegee with a very smooth edge over them gently, back and front, and then pin them up in the best current of air available. A good plan is to open the bottom of a window just far enough to let them hang clear, and pin them to the sash.

Glass negatives may be dried quickly in two ways—by spirit or by heat. The negative should first be allowed to drain "surface dry," and its back and edges should be wiped quite dry. It is then placed in a dish and covered with methylated spirit. After remaining for three minutes in this, it is drained and transferred to a second bath of spirit for a couple of minutes, and then put up to dry in a warm place. It will stand more heat than if it were wet with water. In this case the drying is rather deceptive, and the negative may appear surface dry, yet still be sticky enough to adhere to the paper in the printing frame. It is well to let it have as long again to dry as it appears to take. One bath of spirit may be used, but in such a case the drying takes longer. The spirit may be kept for this particular purpose, and poured back into the bottle afterwards. In such a case, finely powdered plaster of paris should be kept in the bottle, which should appear about a quarter full of the plaster, and when the spirit is poured back it should be well shaken up. The plaster extracts some of the water which the spirit has acquired from the negative.

To dry negatives by heat, the film must first be made insoluble. To effect this, after the last washing it should be put in commercial formalin 1 ounce, water 5 ounces, for three minutes. It may then be momentarily rinsed under the tap and dried in front of the fire. A simple method of drying by heat is to place the negative, after the treatment with formalin, in a dish of boiling hot water for a minute, and then to put it in a current of air. The heat acquired from the water causes it to dry in a minute or two.

These methods, however, never result in quite such good negatives as when the drying has taken place naturally.



Forgery and the Camera.

Some of the tricks of the criminal, and some of the subtleties adopted to circumvent him.

THE startling announcement was made the other day that, in consequence of the skill of forgers working with the aid of photography, the National Bank of Belgium had been compelled at short notice to change the design of its 1,000 franc (£40) notes. The old notes not only had a design in black and light blue, the latter a

colour which was supposed to be particularly difficult to photographic forgers, but they had a watermark as well.

The idea of baffling photographic forgery by printing in different colours was one of the first to be put to practical use, and some foreign banks and Governments went to great expense in experimenting in this direction. We remember,

some years ago, seeing a perfectly innocent looking bank note which, when photographed, bore the inscription "Forged" in bold black letters right across it. The original had been printed with some colourless chemical ink, which, though not noticeable to the eye, was conspicuous to the photographic plate. The note shown us was an experiment, and we do not know whether it ever reached the circulation stage or not. It also was many coloured, and blue figured largely in its decoration.

The perfection which orthochromatic photography has reached has removed the trouble that used to be experienced in reproducing blue. By means of colour sensitive plates and light filters, any colours or combination of colours can be dealt with, but the readers of *Photography and Focus* may well wonder how a watermark is to be reproduced successfully by photographic means. Yet it can be done, and the method is not a new one either.

And first, what is a watermark? Paper is made, as is well known, by allowing a sort of sludge of fibrous matter in water to flow over a sheet of fine metal gauze. The water passes through the gauze, while the fibres form a kind of felt lying upon its surface, and when pressed and rolled and otherwise manipulated, this felt becomes a sheet of paper. If a pattern is woven on to the gauze, that pattern is reproduced on the felt, and shows in the finished paper as a "watermark."

If the fibres of a sheet of paper can be brought into closer contact in certain parts than elsewhere, those parts in like manner will appear as a watermark. Woodbury, to whom we owe Woodburytype, and a host of other ingenious photographic inventions, devised a process called photofilligrain for producing such watermarks by means of photography.

Every carbon printer has noticed that when his print is developed but before it is dry, the image stands out in relief, although afterwards this relief to a great extent dries down. By using a specially thick sheet of sensitised gelatine on which to print, it is possible to get a picture with a great deal of relief, so much so in fact that even after it has dried it still stands out more than does a carbon print when it is wet.

Such a gelatine relief was found by Woodbury to be of the most extraordinary toughness. It might be laid on a sheet of lead and put into a hydraulic press, and when taken out it could be pulled off the lead quite uninjured, and would leave its impression on the lead surface, perfect in the minutest detail. Moreover, it could be used over and over again in this way to make lead moulds. That is the basis of the Woodburytype process.

By bending this gelatine relief round a steel roller, and then passing sheets of paper between such a roller and another smooth one, the relief on the gelatine forced the fibres of the paper together, and the image on the gelatine was reproduced on the paper as a "watermark." It was not a true watermark, of course. That, as we have pointed out, must be made when the paper itself is made, but it was a very perfect imitation of one.

This and similar processes show how the perfection of photography has not been without its influence upon the forger's misdirected industry. The struggle between the banker and the criminal, in fact, is very much like that between the gun maker and the armour plate designer. Each advance made by one is followed by a counter advance on the part of the other, and in this particular matter both bankers and forgers have elicited the powerful aid of the camera.





The Photography of Pretty Girls.



How to succeed with the most popular of subjects.

Why pretty faces do not always result in pretty photographs.

EVERY reader of *Photography and Focus* will realise, I am sure, that there is a broad distinction between "the photography of pretty girls" and "the pretty photography of girls." I expect most have tried their hands at the first, at some time or another. I more than suspect that most, also, have found that the pretty model did not necessarily result in a pretty picture.

Almost every photographer who has had a camera for a few months must have discovered by practical experience that it was one thing to turn his lens towards a pretty face, and quite another to succeed in getting that face still to look pretty on his piece of P.O.P. It may still be pretty to him, because recollection plays a great part in the way in which it appears to him; but it may altogether fail to suggest to anyone else that the model was even passably good-looking.

To do this calls for considerably more than a knowledge of how long to expose and how to develop.

The point at which the beginner is most likely to go astray is in the matter of lighting. He has not got a very fast lens, it is to be supposed, and he has not got a studio with a great expanse of window; so to keep his exposures as short as possible, either he puts his sitter right close up to the window, or else he gets her to pose out of doors. Good portraits can be obtained in both cases, but not at all easily. In fact, these arrangements generally sacrifice everything else to the fetish of a short exposure.

Let the photographer who wants to succeed at portrait work without a studio remember that the one position where it is most difficult to get a good portrait is near the window. If he can get one of his lady friends to devote an hour or two to posing for him some nice bright day, he can learn more by a few practical trials than by reading acres of articles on the subject, and in order that I may justify such an assertion, let me point out how he can best occupy that time.

First of all, he will not want much in the way of apparatus, but two things he should certainly have. One is a tall clothes-horse or screen, over which is thrown as white and glossy a tablecloth as he can get, and the other is some arrangement to hold a background. The simplest is made of two laths tied, as shown, to the back of an ordinary chair (fig. 1). A weight on the seat of the chair will prevent it from falling over, and the lath should be tied right at one angle, as we may want to put the background close to the wall. The background itself is nothing more than a large sheet of dark-brown paper, as smooth as it can be got.

The most convenient room in houses of the stock modern suburban type is not that with a bow window, since a bow-window lighting is not easily dealt with. An ordinary room with one or two windows is best; if it has two, one may be covered up, or even ignored altogether. Such a room is shown in fig. 2.



The room in which the photographing is to be done is the thing least under the control of the photographer. A bay window is to be avoided, as introducing difficulties, and the

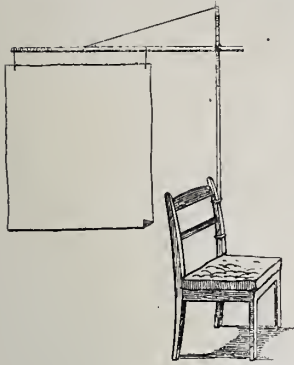


Fig. 1.—Method of suspending a sheet of brown paper to act as a background.

room should be as large as possible to avoid limitations. There is no advantage in having more than one window, as only one source of light should be used. Let fig. 2 represent the room; and it has been selected because it is, perhaps, the most awkward arrangement likely to be met with. A represents the window, up in one corner of the room, with so little space in the corner that, the camera being there, it is actually in front of the window at C, in order to allow room behind it for the photographer to work.

As light is valuable, the top half of the window must be carefully cleaned, or else opened right down as far as it will go. Over the bottom half brown paper is to be pinned up, up to the middle sash. Getting a firm seat for our model, and setting up the camera so that it is level, but low, its lens should not be more than three feet from the floor, all is ready.

The first position is with the sitter at the place marked 1. the camera at C, the background at 1b, the reflector at 1r. This is how most indoor portraits are attempted, and is an arrangement which makes it very difficult to avoid harsh lighting, as can be seen by trial. Still, it will be well to make an actual exposure to show what can be done. With a good bright light and a very fast plate, the full opening of the lens may be used, and if this is $f/8$ or $f/11$ we may give from five to thirty seconds—the longer the better, if the sitter does not move. The aspect of the head must depend on the character of the face; but we will assume for the purposes of this article that, at any rate, a profile view is not required. Something a little less than full face is most often the best, and the face should be turned so that the cheek which is less fully seen is the one which is in shadow.

Having made the first exposure in this way, the model may be asked to move at least three or four feet further from the window and turn slightly more towards it, so that by merely turning the camera on its stand the same aspect of the face is seen. The background is turned in the same way, so that the positions of sitter, background, and reflector become those at 2, 2b, and 2r. Here a second exposure is made; it may be from five to thirty seconds as before; there need be no fear of over-exposure. The movement is carried a stage further in 3, 3b, and 3r, and a fourth stage in 4, 4b, and 4r, always pivoting, as it were, on the camera as a centre. The exposure in each case may be the same.

The head and bust alone should form the subject of the first attempts, and they should be got on a fairly large scale on the plate. If an R.R. lens is used, the back half is much better than the whole, in spite of the longer exposure it requires. The sitter should not be dressed in any very light-coloured garments, as these increase the difficulties, although the skilful photographer will find, later on, that they will also increase his opportunities.

So far nothing has been said about the position of the reflector. The reader may wonder why a reflector should be necessary at all. The reason is that, under the conditions under which indoor photography is carried out, the photograph exaggerates the darkness of the shadows, and therefore a white sheet or other reflector is used to throw lights into those shadows that they may not appear so deep in the picture. Now if the screen carrying the reflector is put close up to the sitter's face—within a foot or two, in fact—its effect can be very plainly seen. It will be noticed that, if the reflector faces the window and is carried well behind the

sitter, it counterbalances the effect due to the direct light so completely that the true effect due to the window is lost. Parts of the face which ought to appear in shadow appear to be quite brightly lit. In the photograph we must remember the reflector will not be seen, and its effects will therefore be unexplained and unnatural. But if we bring it more towards the camera and turn it a little away from the window, we shall find as we do so that it gradually comes, not to compete with the lighting from the window, but merely to soften and to supplement it. This effect should be looked for, and is what one must always endeavour to get.

When the plates are taken into the dark room for development, another caution becomes necessary. There must be no over-development; if there is any doubt about it, we must stop too soon rather than too late. We can always intensify, if the worst comes to the worst. Intensification is much easier than reduction. A portrait negative must look much thinner than a landscape one, and there must be no highest light in it that does not distinctly print out, or the result will be unpleasant.

Finally as to printing. "What! no retouching!" I hear someone say. Dear reader, if you can retouch so that the last state of that negative is not worse than the first, by all means retouch; but retouching is an art in itself, and I never heard of anyone who made it a hobby. If your negative is in need of retouching, send it away and have it retouched.

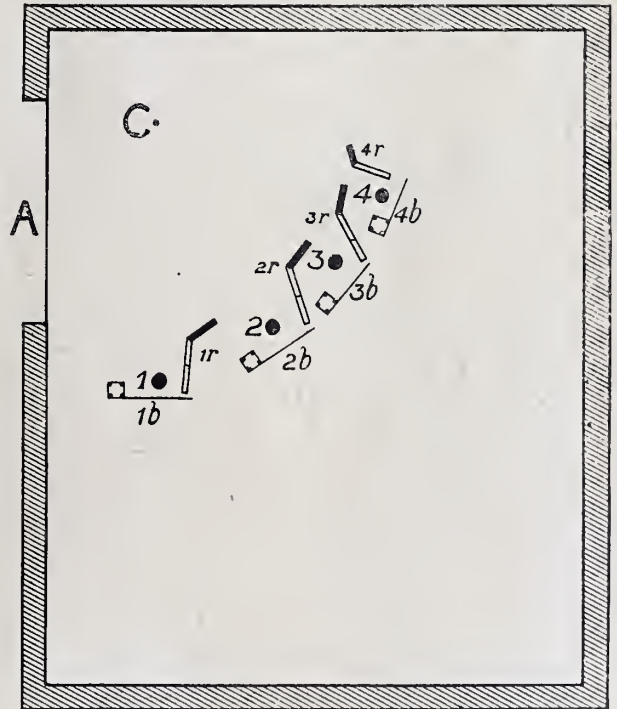


Fig. 2.—Showing four positions in which the lighting of the sitter may be studied with advantage.

But before doing so, try printing it with a piece of tracing paper or of matt celluloid between the negative and the printing paper. It is surprising what a lot of little blemishes vanish in the slight softening which this confers.

There is only one other step to be taken to make the photograph still more perfect, and that is—I say it on the authority of Mr. Storey, R.A.—fall in love with your fair sitter, if you have not taken the precaution of doing so already. But this side of my subject I must leave to abler pens than mine.

Five pounds ten shillings in cash was secured by the sender of the best title in the last title competition. The picture for a title this week is on page xxxiv.



The Crossed Swords Albumat Paper.

ALBUMAT, we presume, stands for a compound of the two words "albumen" and "matt," the paper which bears that name being described as an albumen paper, and being at the same time decidedly matt in the character of its surface. We have never used a sensitive paper of any kind which was so free from any suggestion of a coating or vehicle of the sensitive preparation as this, and the prints upon it are the gainers thereby. It has no glistening sheen, such as is inevitable with gelatine papers, and none of that gloss which used to characterise the albumen papers of the past, but the image seems to rest upon the unaltered surface of the paper itself, in a most artistic and agreeable manner.

The method of toning which the makers advocate is with platinum, a simple solution of potassium chloroplatinate acidified with phosphoric acid being recommended. We found that with this bath some most attractive tones of a pure brown and brown-black character could be obtained very easily.

The printing has to be carried deeply in order to secure the best results, and the prints are then thoroughly washed before toning. A sodium acetate and gold toning bath is

given in the instructions, one of the old type, which was such a favourite with albumenised paper workers of twenty years or more ago. The tones obtained with this are more of a purple brown, and a further variation can be got by those who care for such things by giving the prints a momentary immersion in the gold toning solution and then washing and toning with platinum.

The artistic worker, however, will find that the platinum bath is most to his taste. It yields a very pleasant quality of picture, a little departure from the stock "photographic" tone, and all the better for it. There are no fewer than eleven grades of the paper, and in order to help the photographer to select that grade which most takes his fancy, special sample packets are on sale, containing one piece of each grade, $6 \times 4\frac{1}{4}$ in. in size.

We found the "Albumat" paper to be excellent in every way. By being a print-out paper, the user can see what he is about, while the readiness with which it tones, and the quality of its surface make it particularly suitable for the most dainty pictorial work. It is supplied by Messrs. Chas. Zimmermann and Co., Ltd., of 9 and 10, St. Mary-at-Hill, London, E.C.

Butcher's Royal Mail Panel Camera.

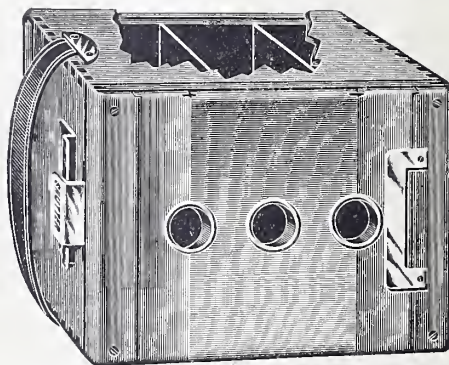
THE camera which we illustrate is a new form of the Royal Mail camera, which Messrs. W. Butcher and Sons have had on the market for some time. The original form, which is still made and sold in large numbers, took fifteen postage stamp size pictures on a quarter-plate; the new form takes three panel-shaped pictures on a quarter-plate.

There is much to be said for a camera of this character, not only on the ground of economy, but because it breaks away decidedly from the standard photographic size, as the postcard cameras did, and gives us what is undoubtedly a much more agreeable shape of picture.

The general appearance of the camera can be seen from our illustration. Externally, it is of polished mahogany, with two bushes for a tripod screw, focussing screen in a mahogany frame, and a spring shutter, which, for long exposures, is provided with a catch. The front has considerable rise and fall. Three achromatic lenses are fitted to the camera, which is divided, internally, into three, as can be seen in the illustration, so as to give the three pictures simultaneously, without one interfering with the rest. A single Cameo pattern dark slide completes the outfit.

The three tall narrow upright pictures which in this way can be secured upon a single quarter-plate are likely to find many admirers. That the shape is a very agreeable one cannot be denied, while it lends itself to treatment with horder negatives most effectively. The camera can, of course, be used to give long narrow horizontal pictures, but the

upright shape, we do not doubt, will prove to be the most popular. It is just the thing for full-length figures, as was shown very well by some attractive examples of work done with it, which accompanied the camera sent to us for trial.



The price of the Royal Mail Panel Camera complete with focussing screen, lenses, and one slide, is £1 5s., and its makers are Messrs. W. Butcher and Sons, Ltd., of Camera House, Farringdon Avenue, London, E.C.

The Twentieth Century Mounts and Whistler Albums.

THE problem of finding suitable mounts for one's best pictures ought to be lessened by the many attempts which the photographic dealer now makes to cater for the wants of those who desire a perfectly plain and neat tinted board, and nothing more. Time was when these could only be inveigled out of printing paper manufacturers in the guise of samples, the aforesaid manufacturers turning up their noses at any order for less than a ton. Things are different now, and one after another eminently suitable mounts make their appearance.

Conspicuous amongst those which appeal to the worker of taste are the Twentieth Century art mounts, which are supplied in several series, in shilling packets of various sizes. The packets can be purchased containing either light or dark tints, the boards themselves being linen faced. These assorted mounts are worth noting were it only for the fact that the packets are usable to the bitter end, if there were

one. There are no tints which are so unsuitable as to be useless, but all are quiet, unobtrusive, and harmonious. They are just the things for members of postal photographic clubs and other workers on the look-out for a light and effective mount.

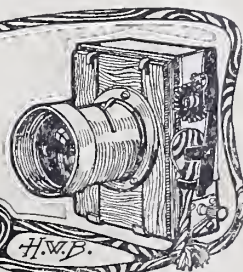
Akin to these, and by the same makers, are the Whistler albums. These are simple neat little booklets of twelve leaves each, made of art paper, with a stiff art paper cover with embossed design. They form an excellent means of getting and keeping together the prints made on any one trip or excursion, and although very low priced, costing only sixpence or ninepence each, there is nothing of the "cheap and nasty" about them.

The mounts and albums are both supplied by the Twentieth Century Photo Co., Ltd., through their sole agents, Messrs. Boots, Ltd., and can be obtained at any of that firm's branches.

The Best Lens and Plate for High Speed Work.

BY ADOLPHE ABRAHAMSON.

The second of a series of short articles on focal plane photography. The first appeared in "Focus" for April 22nd on page 381.



THOSE of my readers who anticipate a reference to lenses of extraordinary aperture, and plates of phenomenal speed—surely, the commonsense accompaniments of high-speed work—will be surprised to read my advice to use a lens which has not a wider aperture than $f/6$, and plates not of ultra-rapid, but of extra-rapid variety.

Of course, there are upon the market magnificent lenses working at $f/4$. Such a lens passes more than twice the light that a lens working at $f/6$ does, but there are great disadvantages in the use of the former. In the first place, a high-class reliable lens working at $f/4$, and of sufficiently long focus, say $7\frac{1}{2}$ in. for a half-plate, is frightfully expensive. Secondly, the accuracy with which focussing is performed must be extreme, and is, in many cases, impossible of achievement. Finally, there are, *me judice*, very few opportunities for the use of an $f/4$ lens when an $f/6$ lens would be entirely precluded, or, to express the matter differently, the light will usually be good enough to enable $f/6$ to be used, or too bad for a lens of the widest aperture manufactured, let alone one working at $f/4$.

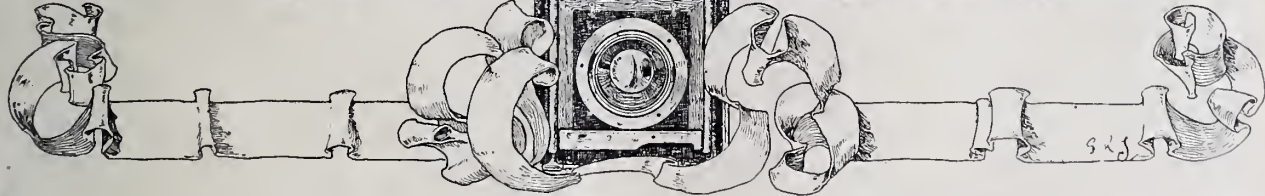
The ideal lens to purchase is one of those beautiful instruments working at about $f/6.3$, the single components of which are corrected so as to be available at their full aperture ($f/12.6$). Such a "single lens" gives to the fast shutter

man an entirely new field of opportunities as I hope to show. There are many comparatively cheap lenses on the market which will work satisfactorily as a combination, but of which the single components are not guaranteed unless very much stopped down.

I find I have very little space left to explain my paradoxical advice to avoid the fastest plates for the fastest work. I ought to precede this piece of advice by another, to continue using any plate to which one is accustomed. The man who consistently uses one plate knows its individual peculiarities, and he probably gets the utmost possible out of it; for although no doubt the differences in chemical composition in the emulsion of various brands of plate are slight, yet these are of immense importance.

Possibly it is because I have not made a great use of the ultra-rapid plate that I fail to secure as good results in my work as I do with the extra-rapid, but there is also a more scientific explanation which has been given by Dr. Mees. He considers that constant of a plate which he terms the "density giving power" as the most important of all if the plate is to be used for extremely under-exposed focal-plane work. Slower plates, says Dr. Mees, can frequently be used for very short exposures, because the high "density giving power" often associated with a slow plate compensates for the low sensitiveness.

PRACTICAL PARAGRAPHS



ODOURLESS SULPHIDE TONER.

Those to whom the smell of sodium sulphide is unpleasant may note that Dr. Kieser states that the addition of a few drops of liquor ammonia to the solution of sulphide just before it is applied to the prints does not interfere with its toning properties, but prevents the solution from smelling so strongly of sulphuretted hydrogen. At the same time he points out that, to some people, the smell of the ammonia is more objectionable than that of the sulphide itself.

* * *

INTENSIFYING AUTOCHROMES WITH MERCURY AND FERROUS OXALATE.

An Autochrome plate which was under-exposed, writes Mr. Chapman Jones in "Knowledge," was reduced with the ordinary hypo and ferricyanide reducer until there was little more than the ghost of an image. After drying the plate, this image was worked up to good density by intensifying it four times successively by the mercury and ferrous oxalate method, without intermediate drying. The whole treatment occupied about an hour and a half. This included, of course, eight washings, and each of these was of six or seven minutes' duration. The plate stood this treatment perfectly, showing no other sign of giving way than a slight frilling at the edges that did not extend beyond the part covered by the rebate of the dark slide.

REMOVING SILVER STAINS.

According to the "Bulletin of Pharmacy" silver stains may be removed from the hands by covering the stained parts with tincture of iodine. The hands are then dabbed freely with dilute ammonia, and washed in plain water, without soap. We have always found ferricyanide and hypo as good as anything for this particular purpose.

* * *

STAINS WITH AMMONIUM PERSULPHATE.

A correspondent of "Camera Craft" has been complaining that his efforts to reduce negatives with ammonium persulphate only resulted in ugly brown patches of stain, that spoil the negative completely. Mr. Clute informs him in reply that these stains are the result of using the solution too long, or for a number of negatives. When ammonium persulphate solution is poured on the negative a milky tinge becomes apparent; shortly afterwards a chalky sediment will form on the surface of the negative. This is a danger signal, and the solution should not be allowed to remain on for more than a few moments after this takes place, as staining only occurs after this sediment makes its appearance. The negative should therefore be removed at this point and well washed for two or three minutes under the tap, subjecting it to a new solution of the persulphate if further reduction is desired.

HOLIDAY INFORMATION.

EXETER.

Kindly let me have some information as to Exeter and district for a photographic holiday.—SENOL.

The "Ever Faithful" city of Exeter, the capital city of the "Shire of Sea-Kings," is certainly unsurpassed for the many and varied attractions held out to the amateur and professional photographer.

An admirable railway service by the Great Western and South-Western Railway Companies makes Exeter easily and quickly accessible from all parts of the country, and through connections with all the leading railway companies are run on the principal express trains.

The city itself is set upon a hill, and to quote a local guide, "On all sides it rises, from the river in the west, from valleys north, east, and south; a hill set among hills, a knoll rising from the surrounding country, crowned with its cathedral."

The quaint High Street, with its Guildhall of great antiquity and beauty, the portico of which makes a characteristic feature, is one of the first places to which the photographic enthusiast should turn his steps.

It would be impossible in this brief summary to attempt to do even the barest justice to the crowning glory of Exeter—the Cathedral Church of St. Peter. Permission to photograph the magnificent interior, which certainly ranks amongst the finest in the world, may be readily obtained. In the Chapter House, Cloisters, Palace and Close adjoining, many hours may be spent profitably. The old remains of the Castle of Exeter, Northernhay, with its fine statues and beautifully laid out gardens; the river Exe, with an unlimited scope for ideal landscape work; all make a fortnight none too much in which to appreciate the beauties of the city and its surroundings.

Should the visitor be inclined to look further afield, he will find that Exeter is the key to the whole beautiful "West Countree." Exmouth (10 minutes by rail), from which may be taken many trips by sea to the most charming spots on the South Devon Coast, may be reached by 1s. return excursion daily. Sidmouth, Seaton, and Okehampton (the latter for the glories of Dartmoor) are about from 45 to 60 minutes journey, return excursion fare daily 2s. by certain trains. Dawlish, 1s.; Teignmouth, 1s. 3d.; and Torquay, 2s. 6d., are accessible.

Apartments may be obtained at very reasonable charges and to suit all pockets. Plates, papers, etc., may be had from the local dealers, who will be found most obliging and willing to assist. Mr. Hinton Lake, one of the leading dealers, is in occupation of, I believe, the oldest house in the High Street. All have dark rooms free to customers.

A guide book will be sent to intending visitors on application to the Town Clerk, H. Lloyd-Parry, Esq., the Guildhall.—A.E.S.

ANTWERP.

I hope to have a couple of days to spare in Antwerp early in June, and should like to know of any camera work to be done there.—NOLLIS.

Antwerp will be found teeming with interest for the hand camera user. Along the riverside, the Quais Van Dyck and Jordaens, the Place Verte, the flower market, the zoological gardens, and the river trip to Tamise, all provide numberless opportunities. The Hotel de Ville, the Steen and Plantin Museums, the cathedral, the wall of Quentin Matsys, the St. Paul's Church, and the Rubens' House should all be seen, and at most of them photography can be done. In fact, the difficulty in a stay of only a couple of days will be to decide what to leave out.

There is no trouble to be anticipated although the city is fortified, as the photographer is not likely to wander as far as the fortifications. English plates and papers can be bought at several shops.—C.G.

CASTLE DOUGLAS.

"G.R.S." asks for information as to Castle Douglas and district as a photographic centre.

The town of Castle Douglas is in itself a bright and clean little place, situated at the end of Carlingwark Loch, about 200 feet above sea level. It is a place of about 3,000 inhabitants.

Carlingwark Loch is a beautiful sheet of water, over 100 acres in extent, well studded with wooded islands, and fringed with trees, many of them very old. This in itself would provide work for a week or ten days.

Castle Douglas, being situated as it is in the very centre of Kirkcudbrightshire, and the roads all over being good, would make a splendid base for "doing" the whole of Galloway. To the north the photographer will find country of the very wildest description, heather clad, rugged hills, rocky streams, waterfalls, etc., while to the south and within ten miles he can reach the seashore.

Should the photographer care for historical subjects, he will find them in plenty in this district. I may mention the following, all being within cycling distance, and some of them within walking distance, of Castle Douglas: Threave Castle, the ancient stronghold of the Black Douglas, famous in Scottish history; Orchardton Tower, said to be the only round tower in Scotland; Dundrennan Abbey, one of the most beautiful ruins in the country, where Mary Queen of Scots spent her last night in Scotland. There are many more such subjects.

The whole district is well wooded, and many charming water and woodland effects may be got on the River Dee or Urr.

As for lodgings, these may be easily obtained, at from 20s., or even less, in private houses, to several guineas per week in the hotels. I shall be very pleased to put parties into communication with a view to finding lodging on hearing of their requirements.

There are two dealers; both have dark rooms for the use of customers and tourists, and both keep good fresh stocks of every kind of photographic plate, paper, chemicals, etc.—J.W.



Stand Developer with Adurol.

The stock solution described below is diluted with twenty times its bulk of water, or more if the action is thought to be too rapid. At the strength named most commercial plates are fully developed at ordinary temperatures in less than half an hour.

Sodium sulphite ...	8 ounces
Potassium carbonate ...	6 ounces
Water ...	20 ounces

When all is dissolved an ounce of adurol is added.

Bleacher for Sulphur Toning.

The following solution may be used to bleach bromide and gaslight prints which are afterwards to be toned to a sepia colour by means of sodium sulphide:

Hydrochloric acid ...	50 minims
Potassium bichromate ...	20 grains
Water ...	5 ounces

The prints after bleaching must be washed until all trace of yellowness due to the bichromate is removed.

A Ferric Oxalate Reducer.

This reducer, known as Belitzski's, is made of—

Potassium ferric oxalate ...	200 grains
Sodium sulphite ...	500 grains
Water ...	10 ounces

One drachm of oxalic acid is added when all is dissolved and well shaken. The clear liquid is poured off the crystals, and two ounces of hypo are then dissolved in it.

A Walnut Stain for Frames.

This can be made by dissolving in twenty-five ounces of hot water

Potassium bichromate ...	¼ ounce
Sodium carbonate ...	1½ ounce

Before use, two and a half ounces of vandyke brown are added to the cold solution.

A Stain Remover.

To remove developer stain from negatives the following solution will be found very effective:

Thiocarbamide ...	20 grains
Citric acid ...	10 grains
Water to ...	20 ounces

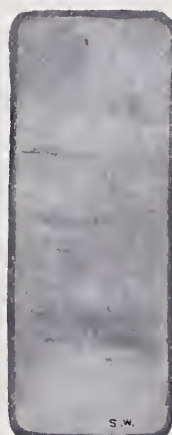
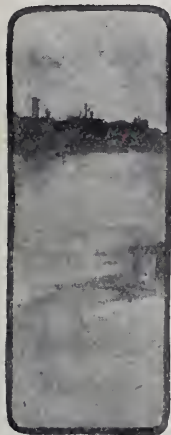
Diagram Lantern Slides.

To make a slide of a pencil sketch or diagram a piece of clean glass may be coated with a varnish made of—

Sandarac ...	10 grains
Mastic ...	10 grains
Ether ...	1 ounce
Benzole ...	2 drachms

The necessary pencil work is done on the matt surface left by this varnish, and the slide is bound up as it is, or, preferably, is varnished by flowing over it

Sandarac ...	15 grains
Mastic ...	15 grains
Ether ...	1 ounce



Truthful Photography.

By Frank M. Sutcliffe. Special to "Photography and Focus."

WITHIN the last few weeks showers of snow and hail have been chasing each other over the hills, and beautiful they looked. Like many other things, this beauty was too fleet of foot to be caught by the man with the camera. He may catch the ploughman and his team as it creeps up and down the bit of tillage on the hillside, but the shower of hail was too quick for him. He may have fixed his camera up and be waiting till the shower is thin enough to see through, and he may expose his plate exactly at the right moment when the skirts of the shower are sweeping up the hillside opposite, leaving in their track a delicate white film, where the last hailstones are dancing their hardest on the ploughed fields and the moorland roads. But he might have saved his plate, for it is certain that he will have to write under his print, "This is a shower of hail."

In the streets photography is perhaps more truthful, and the snow showers help to make the lodging houses more like fairyland.

Photography is often too truthful; it does not know how to exaggerate at the right time. The sober truth is so different from the amplified statements, to which we have become accustomed, that it appears to be understated. Photography, too, is making the world a very sober place by correcting our imagination continually.

When I was a little boy I had a picture of a rhinoceros. He was a lovely beast with terrible horns and bosses of armour plate all over his skin. Even his hoofs were enough to frighten anyone: they turned up like his horns. Future generations will not be able to enjoy that rhinoceros as we did. He has been stripped of his armour plate, his hoofs, and most of his horns by truthful photography, and he is no longer worth looking at. If Blake had to paint Heaven and the other place now he would have to go to a photographer and buy some photographs of—was it Manchester "The Walrus" said was more like one of

these places than anywhere? If Blake were foolhardy enough to imagine these places, then he would be comforted with the everlasting photograph, and be told that photography had corrected all the mistakes and misconceptions of the past century or two.

Photography again by its truthfulness has made the beauty spots of the earth as commonplace as the rest of it. When we were young we wanted to go everywhere to see everything, for we only knew the world by pictures. An artist would come home from his travels in Italy or France, and as we peeped over his shoulder, as he explained his note books and sketch books to our elders, we resolved that we would buy no more toffee, but save up till we could go to Italy. So strong was this determination with some of us that we even bought an Italian conversation book and studied it, that we might speak Italian when we had saved up enough pennies to take us there. But how has photography changed all their desires! The magazines are full of photographs of the places we wish to see; but so ordinary, and often even ugly, has the camera made them that I doubt if anyone were to offer to pay all our expenses we should think it worth while packing our portmanteaux. Yet some of us still wish to believe that these beautiful places are as beautiful as we imagine them to be; but our faith is terribly shaken with so many photographs about.

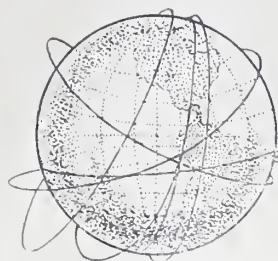
A charming woman the other day held her hand in front of her face as a press photographer was about to photograph her as she was performing some public function. She was jealous of her beauty; which these beautiful places in France and Italy, to say nothing of England and Scotland, are not.

If Japan could only compare herself as she is painted with herself as she is photographed I wonder which she would consider the most truthful likeness. I know which she would order from.

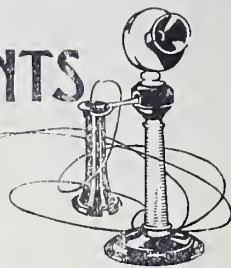
These notions, statements, facts—call them which you will—should make photographers very serious, sober people, seeing that they have it in their power to make or mar the reputation of any person or place.

Forthcoming Exhibitions.

SOCIETY.	ENTRIES CLOSE	EXHIBITION OPENS.	NAME AND ADDRESS OF SECRETARY
East Sussex A.C.	May 5	May 21	Miss Watson, Deverell Hurst Studio, De Chain Avenue, St Leonards. T. D. Grady, Collingtree, Cambridge Road, Bromley, Kent.
Bromley C.C.	June 1	June 10	



REPLIES TO CORRESPONDENTS



REGULATIONS.—(1) Envelopes must be marked "Query," and the "Enquiry Coupon" found elsewhere must be enclosed. (2) The full name and address in addition to a *nom-de-plume* must be given. (3) Only one question on one subject is allowed in each letter. (4) Prints may be sent

for criticism, but a separate coupon must be sent with each print, and a stamped addressed envelope (not loose stamps) for their return. Queries are dealt with in strict rotation in the order received. Only "Urgent Apparatus" queries will be dealt with by post, for which purpose a stamped envelope must be enclosed.

THE WEEK'S QUERY.

ASCERTAINING THE TRUE VALUE OF STOPS.

W. D. M. writes asking how he may find out the actual effective diameter of the opening of any given stop.

The working or effective diameter of a stop is not necessarily the same as the measured opening of the metal of the stop itself, as this takes no account of the converging action of the front lens on the rays which enter it. Hence the need for some such system as has been described above.

The method generally recommended is to focus the camera for infinity, to remove the focussing screen and substitute for it a sheet of card with a pinhole in the centre of it. Then a candle is held just behind the pinhole, and on looking on the front surface of the lens, or on holding a piece of card or ground glass in front of the lens, a circle of light will be seen, which circle is the exact size of the effective aperture of the stop that at that moment is in the lens.

As with many patterns of camera, particularly of the magazine type, the back is not very accessible for this purpose, the method may be reversed. The camera is focussed for anything, it does not matter what, "the infinity" distance is as convenient as any, and a plate is inserted. The process should be carried out in the evening, or at least in a room from which daylight is excluded. Artificial light, so long as it does not shine into the lens, does not matter. A sheet of card is fixed up in front of the camera and at a distance from the stop in the lens which is as nearly as can be measured the distance of the plate from the stop, when the camera is focussed for infinity. In this card opposite the centre of the lens a pinhole is made. When all is ready a candle is held close behind the pinhole, so that its light may shine through it to the lens. This should be done for about a minute, and the plate may then be developed in the ordinary way. It will show a sharply defined circular black patch, the diameter of which is the working diameter of the stop then in use. By using half a plate, and sliding it on in the dark slide or sheath between the exposures, a set of circles can be got upon it showing the actual diameters of each of the set of stops.

REPLIES IN BRIEF.

J. N. SWEET (Handsworth).—Many thanks for your good wishes.

A. E. LARGE (Streatham).—We hope your prints are all covered.

A. READER (Cardiff).—Many thanks for the card and good wishes.

SILVER (Garvagh).—Your second question was answered in *Focus* a fortnight ago.

B. B. M. (Braintree).—Yes, the formula named will do very well, and should keep.

E. E. (Rickmansworth).—The Paget Prize Plate Co., of Watford, make collodion P.O.P. besides the self-toning kind.

W. D. M. (Bowes Park).—(1.) Not appreciably. (2.) The mere alteration of its position will not affect the values. See above. Thanks for good wishes.

C. S. STARBUCK (Market Rasen).—Clement and Gilmer's London address is 1 to 3, Holborn Circus, London, E.C. We have not heard of the lens in question.

FRANCIS (Bradford).—We are sorry to say we never even heard of any of them. Such, alas, is fame. Nor are we aware of any paper that gives addresses of such workers. The matter is quite outside our province.

BELLOWS (Dalston).—We do not recommend attempting the process at all. Whatman's paper will do for rough surfaces. The paper should be sized to start with, and a baryta-coated paper used to get a glossy surface. Many thanks for your good wishes.

W. SIMS (Coventry).—We do not know that one is better than another, as far as the standard makes are concerned; and do not feel justified in drawing distinctions where all are good. You will want very strong negatives and deep printing to get anything approaching black.

E. J. WHITE (Yelverton).—The effect is halation caused chiefly by over-development, but over-exposure has helped. If you use backed plates you will not be troubled with it; but with unbacked ones it should not occur in a case of this sort if the exposure and development are both correct.

VICTOR GROSS (Stamford).—(1.) A folding quarter-plate camera with dark slides, taking plates. (2.) There is no market, as a rule, for old negatives, nor even for the glass. (3.) We hit it with anything handy. (4.) We have a page of such announcements every week, and have no particulars of any others.

A. M. NICHOLSON (Wigtown).—Yes, it would be eligible.

A. G. D. TEAGUE (Bath).—We mean to try to continue to deserve your good opinion.

CONSTANT READER (Ilford).—We are afraid we cannot help you. We have no formula for such a print.

ALFRED CRACKNELL (S.E.).—We envy the rapidity with which you make up your mind. Who was Ichabod?

A. J. CLUTTERBUCK (Bromley).—Gunter Wagner, 80, Milton Street, London, E.C., supplies what you require.

ISO (Denmark Hill).—The nearest ruins to London that we know of any importance are Rochester Castle.

E. A. COLBORNE (Ringwood).—The factors we suggest are 10 without or 5 with bromide. A single trial will enable you to see if these give you the kind of negative you require.

SUNDRY (Dublin).—The wax which has melted and run over the Autochrome can easily be removed by means of benzine, which should be flooded over the plate, this being then swabbed with cotton wool.

W. H. (Lancaster).—We are sorry we cannot pursue the matter; but this column is intended to help, not to pander to catechetical eccentricities generated by a morbid tendency towards paradox.

REFLEX (Chiswick).—The material used for roller blind shutters is specially made for the purpose, and we doubt if it could be bought in small quantities. Perhaps the makers of the shutter would let you have a little piece.

OPAL (West Hampstead).—The idea is not a new one, but if the exposures are not made too long is very effective. Whether the heat will hurt the negatives depends on the degree of heat employed. Probably it would in time; but we should not expect the making of a single enlargement would be injurious.

F. GIBSON (Acton Green).—It is nothing the matter with the plate, but chemical dust of some kind that has reached the film in the dark room. Possibly all the developer was not dissolved, or some alkaline dust settled on the plate, or rust particles were in the water. Any of these would cause this trouble.

J. H. POLLARD (Sheffield).—We can only assume you refer to the ferrotype process, in which the positives are taken on thin metal plates. We know of no other. Full particulars can be obtained by sending sixpence to Jonathan Fallowfield, 146, Charing Cross Road, London, W.C., for a copy of his ferrotype handbook.

CHUM (Huntingdon).—We are sorry we cannot advise you. If the card sent is really the best it will do, we are convinced for the sake of their own reputation that the makers would be only too glad to have an opportunity to put it right. Surely there is something wrong elsewhere; we cannot credit that this is the best it will do.

W. L. OXEY (Sheffield).—Many thanks for your good wishes. The only difficulty is with the criticism. We tried it but had to discontinue it on account of the labour involved. Our competitions often bring more than a thousand entries, so you will see that it is out of the question. We are none the less obliged to you for the suggestion.

N. S. (Stoke Newington).—If he paid the full price for them in the ordinary course of business there is no necessity to consult the photographer; the copyright belonging to the heirs of the deceased. The photographer could register the copyright of the portrait, but it would not give him any more claim to it than he has at present.

J. WATSON (Glasgow).—(1.) You had better get "How to make Ferrotypes," post free 6d., from Jonathan Fallowfield, 146, Charing Cross Road, London, W. We could not find space in this column to give particulars at sufficient length to be of use. (2.) All lenses do so. There is no way of doing anything else unless you get a reflector camera.

B. G. R. (Leicester).—If it is not a copyright photograph, it is not an infringement to copy it; but do you suggest that a photograph which is a copy of a half-tone block in a newspaper would take a prize in a photographic competition? If so, we can only say we are sorry for the competition. Probably it was some stock view which every tourist takes.

VIEWFINDER (Birmingham).—The simplest way, it seems to us, would be to block out everything on the viewfinder except what was got on the plate itself. This can be done with a small brush and brunswick black. Otherwise a special finder would have to be bought, and probably made at some expense, as the conditions, although very good, are not common.

CORRESPONDENCE

The Editor is not responsible for the opinions of his Correspondents.



FROM THE EDITOR OF "FOCUS."

Sir,—Will you kindly permit me, through the medium of your columns, to express my very sincere thanks to the numerous readers who have taken the trouble to address me on the subject of the amalgamation of *Photography* and "Focus."

It is most gratifying to me to know that the friendship which I had believed existed between "Focus"

readers and myself is such a very real one, and I shall always look back with feelings of pleasure upon our past intercourse. For the many photographs received I also tender my warmest thanks.

Yours, etc.,

ARTHUR C. BROOKES.

TRIMMING MULTIPLE MOUNTS.

Sir,—I have read with interest the article on "Trimming Multiple Mounts" in *Photography* of May 5th. The writer is, I think, however, under a misapprehension as to the dimensions of standard set squares.

A set square of 30° and 60° has its longest and shortest sides in the proportion of 2 : 1, thus, the square will advance 1 in. exactly for every 2 in. it slides along the rule, and not about 3 in. as stated. Squares with smaller angles, and, therefore, giving a greater magnification, are seldom seen, but would be more suitable for the work.

I append a schedule of ratios :

15° set square, sides 2588 : 10000—approx. 4 : 1

20° set square, sides 3420 : 10000—approx. 3 : 1

30° set square, sides 2000 : 10000—exactly 2 : 1

Yours, etc.,

E. B. WEDMORE.

REDUCING AUTOCHROMES WITH PERSULPHATE.

Sir,—It may be of interest to some Autochrome workers to know that excessive density can be reduced by means of persulphate.

I do not remember seeing this point mentioned in connection with Autochrome work, and thought that possibly my experience might be helpful to some others. My first Autochrome exposure this year was made ten days ago, and, either through under-exposure or over intensification, or perhaps both, it turned out so dense that I was on the point of giving it up as a failure, when the idea occurred to me to try and reduce it.

I used the ordinary two and a half per cent. solution of persulphate, and found that it at once attacked the silver, and in two or three minutes had reduced my Autochrome to quite a presentable specimen. The action was extremely rapid, due to the thin coating, I suppose, and, of course, had to be watched closely.

The colours do not seem to have suffered in the least, though this might have been expected, considering the strong oxidising power of persulphate.

Yours etc.,

C. W. DOXEY.

WANTED, AN OUTCRY.

Sir,—Mr. Ronald Davison, in his article bearing the above title, *Photography*, May 5th, expresses some ideas with which one is in perfect agreement. There can be no doubt that monochromatic photography has reached a certain level in its aims. We have now become conservative in our work. Picture making by photographic methods must comply with certain fixed rules of composition, of chiaroscuro, which stifle all attempts of originality in the presentation of the subject. This compliance must be followed if the pictures are to obtain any material recognition at photographic exhibitions. How seldom, if ever, does an entirely original photographic picture

obtain an award. The word "original" is used by me advisedly. What was the attitude adopted towards Holland Day, towards Steichen, and towards Coburn, when their work first appeared? There, indeed, was originality of purpose, of presentation, and of aesthetic feeling. These men, and others hailing from America, introduced to us newer ideas and methods. They were treated with derision, and now, apparently, we only tolerate them. They have not, as yet, come into their own. Perhaps their time is in the future.

What is wanted in these days of stagnant methodism is not "an outcry," but a man, or a small company of men, who will by their breaking away from traditions cause "an outcry." The Photographic Salon adopted a scheme of exhibiting "photographs" which were heterodox in character, some years ago, but they appear to have settled down to a complacent individuality. That is to say, each exhibitor shows pictures which nearly everyone can recognise as being by "Mr. This" or "Mr. the Other."

And is not such the case in all our exhibitions? However original an exhibitor may be, there is always an individuality which stamps his work. A man cannot rise above himself.

But should a man come who presents to us newer aspirations, newer feelings, and pictures untrammelled by mere rules, and traditions, what is the result? "An outcry!" He has needed none of these things, and not until someone whom we regard as an authority stamps them with the mark of his approval, are they received with any degree of toleration. So are we the slaves of rules and traditions.

But what of the intellectual and physical courage required to present an originality—one which is not an accident, but has been carefully thought over and worked out. It may be this requirement of courage is good, or all kinds of eccentricities might be brought forward. To continue expressing himself in a heterodox manner which does not find general favour argues a certain amount of stamina, and belief in his convictions on the part of the exhibitor.

It would be better both for ourselves and the cause of photographic art if we could at times break away from all arbitrary rules, and produce pictures which would not only raise the outcry your contributor wishes for, but would also tend to raise the present status of photography from its present level, and cause a reaction which would only be productive of future good.

Yours etc.,

HARRY QUILTER.

A PLEA FOR TRUTH.

Sir,—Whilst we are being educated up to "high art," which seems in photography to consist largely of pictures that no fellow can understand—pictures which would often look as well when viewed either way up—let us at any rate have truth in photographs.

Some time ago I was looking through a photographic paper, and saw a prize-winning print reproduced. It represented an engine standing at a platform, blowing off some steam; in the foreground were the rails and some points—obviously a piece of faking. For, had the photographer been an engineer, he would have known points such as he showed could not possibly be laid.

On another occasion I saw a reproduction of a photograph purporting to be a sunset from a certain point. Now I happen to know that spot well, and I was certain it could not be a sunset. But the next time I went there I took the trouble to take a compass with me. As I thought, the photograph is a most interesting record, for it records the sun setting in the south-east.

I am no f/64 advocate; on the other hand, I think the opposite extreme is just as bad, and "faking" is a direct contradiction to the word "photograph"; but in faking I do not include the introduction of clouds.

In conclusion, let me say that neither of the photographs I have alluded to appeared in *Photography*.

Yours, etc.,

W. O. E. MEADE-KING.

(Several letters are held over.)



A Visit to Clovelly.

By E. Staniland Pugh.

CLOVELLY is unquestionably one of the most curious towns in the British Isles—as delightful a little place as one could wish for. Its quaint old-world beauty is almost inexpressible, while its simple rustic charms, though so much visited, are still retained.

Clovelly is generally considered to be far more like one of the quaint villages which nestle in the gorges of the Eastern Riviera than anything we have in our own country. Situated on the North Devon coast, on Bideford Bay, a few miles east of Hartland Point, it consists of one steep street only, leading up from the little old pier and landing place to the top of the cliff, which is of considerable elevation. The street itself is a series of broad steps formed of small boulders, up which the men and donkeys climb; these latter are the only means of transport.

The houses and cottages in the place are artistic in the extreme. Their small gardens are bright with flowers and creeping plants. Even Kingsley, who spent most of his boyhood here, great master of word-painting that he was, in attempting to depict the glories of this charming spot, acknowledged himself beaten.

On approaching Clovelly from the sea, the town appears as an irregular white streak on the face of the cliffs, which elsewhere are buried deep in woods. When the steamer finally slows down about half a mile from the beach the beauty of the place is at once apparent, the dazzlingly white houses stretching one above the other up the richly wooded slopes presenting a most quaint aspect and revealing the unique character of the town.

Burly fishermen with their boats await the arrival of the steamer, and assist the passengers to disembark; and, as soon as each boat is filled, they pull for the shore, running in amongst the red-sailed herring fleet clustered round the little stone pier, and safely deposit their freight on *terra firma*. It is a curious sight to see all the visitors wending their way up the steep street to the top. The little shop where picture post cards and views are on sale is literally besieged at once, while elsewhere at numerous cottages luncheons and teas are served in the gardens. The tables for these feasts are spread with such snow-white cloths, and everything is so fresh and spotlessly clean, that there is no wonder that the Devonshire cakes and cream are in such great demand.

At the crown of the hill and skirting the cliff for nearly three miles, through lovely woods, is the famous hobby drive. The views, which are obtainable from many points, render this, for all who admire magnificent scenery, a most popular excursion. Trees, gorse, rugged rocks, and brambled paths all unite to show the prodigality of nature. Lying far below, Clovelly can be seen; while in the distance, amid the great expanse of sparkling sea, appears the dim outline of Lundy Island.

Those who know the North Devon coast can tell how exquisite is the colouring on all sides, varying as it does with every change in the sky. The Italian blue sea is enlivened by the trawlers dotted here and there. The cliffs, which are broken and rugged in many places, are high and grand, one fine headland beyond another rearing its bold front to the channel, and Hartland Point, finest of all, terminating the scene.

During the summer months it is not at all an unusual event for several steamers to arrive together. Then is the little town packed with visitors and the scene one of great anima-

tion. Then do the cottagers reap a rich harvest, for one is compelled to patronise them were it only for an opportunity of inspecting the interiors of their quaint dwellings. As might naturally be expected, nearly every visitor brings a camera with him; but on such an occasion the numerous sightseers in all directions make the chances of successful photography somewhat remote. A hand camera is not altogether suitable here, at least for scenes in Clovelly itself, unless it has a great rise or is fitted with a swing back, on account of the steepness of the street. The views accompanying this article were, however, taken with a hand camera, but to do justice to this delightful spot a stand camera is almost a necessity.

Clovelly, besides being accessible by steamer, may be reached by coach from Bideford, eleven miles distant, the railway not coming nearer than this; but most visitors arrive by steamer and come ashore in boats. The time to see Clovelly in perfection is in spring, when all Nature is in her first green freshness, or else in autumn when the tourists, like swallows, have departed, and the leaves are changing into glowing tints.

Photography for the very Young.

WITH a view of encouraging photography in the nursery, we are beginning, whether we ever finish them or not is another matter—we are beginning, as we said, a series of elementary articles for the very young in the approved form of questions and answers.

Lesson I.

Question. "Who invented Photography?"

Answer. "It is doubtful whether it was Messrs. Iliffe or the Editor."

Q. "Why did they invent it?"

A. "That it might come out every Tuesday."

Q. "What is a tripod?"

A. "A three-legged thing which holds the camera."

Q. "Are kilts or trousers considered the most becoming dress for tripods?"

A. "Neither; the nude is preferable."

Q. "How do you make a camera stand?"

A. "By resting it on the floor."

Q. "How do you make a dark room sink?"

A. "By digging a hole beneath it."

Lesson II.

Q. "If you were hard up how would you raise the wind?"

A. "With a bellows camera, of course."

Q. "What do you understand by focussing?"

A. "Moving the camera or the lens till the image becomes fuzzy."

Q. "What precautions should be taken in taking waves?"

A. "To care care that the waves do not take you."

Q. "How would you make a lantern slide?"

A. "By pushing it on the ice."

Q. "How do you take a young lady?"

A. "Round the waist, of course."

Q. "How do you take a baby?"

A. "You simply take it away."

Q. "What is an instantaneous shutter?"

A. "It is a thing like the kitchen boiler which is always going wrong."

Q. "What is the best way of finishing enlargements?"

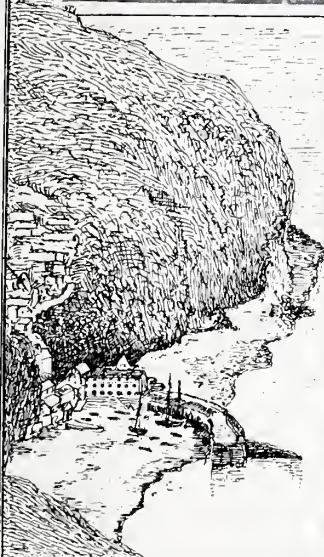
A. "Burning them."



Coming ashore.



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ADVERTISEMENTS.—All communications on advertisement matters should be addressed—The Advertisement Manager, PHOTOGRAPHY AND Focus, 20, Tudor Street, London, E.C. All copy for displayed advertisements for the issue of any particular week must reach Tudor Street by the first post on Monday morning in the week previous.

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BOX NUMBERS.—For the convenience of advertisers, letters may be addressed to numbers at the office of the paper. When this is desired, 2d. will be charged for registration, and three stamped and addressed envelopes must be sent for forwarding replies. Only the number will appear in the advertisement. Replies should be addressed, "No. 000, c/o PHOTOGRAPHY AND Focus, 20, Tudor Street, London, E.C."

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ADDRESS.—All communications for the Editor should be addressed: The Editor, PHOTOGRAPHY AND Focus, 20, Tudor Street, London, E.C.

TO CONTRIBUTORS.—The Editor will be glad to consider original up-to-date manuscripts on photographic subjects. All contributions must be typewritten, or in very legible handwriting, on one side of the paper only, and should bear the name and address of the sender. Letters or communications arising out of matters already appearing in the paper are not paid for. The Editor disclaims legal responsibility for the safety of matter submitted to him, but he will endeavour to return rejected manuscripts, etc., when a stamped addressed envelope is enclosed for that purpose. No notice whatever can be paid to communications without the name and address of the sender, not necessarily for publication.

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PAYMENTS.—Articles and illustrations are paid for on acceptance.

INTERVIEWS.—The Editor will be at 20, Tudor Street, on Tuesdays, between the hours of 2 p.m. and 5 p.m., but can only be seen at other times by appointment.



TO SECRETARIES AND REPORTERS.

We wish to remind secretaries and reporters that when reports are sent to us and do not appear, it is because such reports are not suited to our columns. We are always glad to give societies what publicity is possible, but abstracts of lectures or demonstrations cannot be inserted. Actual statements made by the lecturers, or details of photographic interest, are always welcome.

CHANGE OF ADDRESS. Mr. Arthur Payne advises us that in future his address will be 51, North Parade, Whitley Bay, Northumberland.

AT THE TORBAY CAMERA SOCIETY the result of the voting on the March portfolio was that Miss Bullock took first place for pictorial and Mrs. Marillier first place for technical work.

"FOCUS" LANDSCAPE COMPETITION. Mr. J. B. Anderson writes to say that the fact that he was awarded a prize in Class B must be in error, as his prints were entered in Class A, Mr. Anderson not being a beginner.

GOLDONA COMPETITION. Messrs. J. J. Griffin and Sons, Ltd., of Kingsway, London, W.C., ask us to point out that they have arranged a competition for prints on Goldona, open only to amateurs who have not been successful in any other photographic competition. Entries close July 31st, the prizes being in cash.

"SEARCH FOR A BROWNIE." Paragraphs under this heading appeared in many of the newspapers a few days ago. It was not a Brownie camera that was being searched for, however, but a suitable subject for one. The paragraphs stated that a leprechaun in a green hat had been seen in North-west Meath and Killucan.

A MEETING OF SECRETARIES of affiliated societies was held at 66, Russell Square on the 4th inst. It has been decided, in future, to hold the meetings quarterly. The subject of interchanging lectures was discussed, and it was arranged to send out to secretaries each month a list of lecturers who were willing to assist affiliated societies.

THE AWARDS AT THE BEDFORD PARK Polytechnic Photographic Club's exhibition were as follows: Class A.—First, F. W. Chipps; commended, F. W. Chipps, Miss D. Feltham, and Miss F. Paling. Class B.—First, F. W. Chipps; commended, W. Shiers. Class C.—Commended, C. Hankins and Mrs. Feltham. Class E.—Commended, E. Elvin and F. W. Chipps.

THE HARPER STEREOSCOPIC UNION. The secretary, G. A. Geary, of 33, Brereton Road, Bedford, writes that there are a few vacancies in this stereoscopic postal club, of which the subscription is 1s. per annum.

THE AFFILIATION OUTING this year is to Ayot, on the G.N.R. Trains leave Kings Cross on May 23rd at 1.15 and 2.30 p.m., the day excursion fare being 2s. 3d.

AFAR IN THE FATHERLAND. Reporting Mr. Wastell's lecture with this title at the West Surrey Photographic Society, our correspondent comments on the magnificent selection of pictures by which it was illustrated, and concludes, "Wondering at the lecturer's versatility, one can easily believe after all his wanderings that he may well claim to have become proficient in 'quite seven difficult, and mostly bad, languages.'"

SPRINGTIME PHOTOGRAPHY was the subject dealt with by Mr. W. H. Mayne at the Devonport Camera Club. He drew attention to the opportunity spring afforded the photographer of securing the landscape and sky in one negative, especially if isochromatic plates were used, and with a screen in particular. The marked difference seen in securing subjects with such plates as compared with the ordinary made up for any supposed difficulty that may seem to prevail, but which in practice did not exist. Especially was the advantage seen in the rendering of colour values and tones in flowers.

THE PRESTON CAMERA CLUB, at its annual meeting, elected the following officers: President, J. Toulmin, J.P.; vice-presidents, Dr. Derham, W. Houghton, T. R. Jolly, E. Myres, T. Newsham, and F. A. Williamson; council, A. Broadbent, Jas. Brunton, W. Dresser, J. Gill, T. Johnson, A. Kinder, A. Lathvary, W. E. Morris, L. Yates, and J. Sargent; chairman, A. Kinder; vice-chairman, L. Yates; lanternists, T. Johnson, J. Brunton, and W. Dresser; librarian, W. Couperthwaite; auditor, W. E. Morris; L. and C.P.U. delegates, C. Mantell and A. Broadbent; honorary secretary and treasurer, Chas. Mantell, Clarendon, Powis Road, Ashton, Preston.

THE STONE AND DISTRICT PHOTOGRAPHIC SOCIETY. Exhibition awards: Class I.—First prize, J. Warrilow; second, F. Ravenscroft; third, E. Phillips; honourable mention, R. F. Smith and T. Goodall. Class II.—First prize, J. Warrilow; second, R. F. Smith; honourable mention, C. H. Price. Class III.—First prize, R. F. Smith; second, E. Phillips; honourable mention, R. F. Smith. Class IV.—First prize, J. Warrilow; second, T. Goodall; honourable mention, R. F. Smith and C. H. Price. Class V.—First prize, A. Mountford; second, R. Mountford. Class VI.—First prize, F. Ravenscroft. Class VII.—First prize, J. Warrilow; second, R. F. Smith. Champion award, J. Warrilow.

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PHOTOGRAPHS FOR REPRODUCTION by the half-tone process in magazines, etc. The best for the purpose, so Mr. Leslie E. Clift told the Royal Photographic Society, are good gaslight prints. Double-toned photographs are a great bugbear to the process worker.

× × × ×

A SPECIAL BARGAIN LIST of cameras, lenses, enlargers, etc., has been issued by the Tella Camera Co., of 68, High Holborn, London, W.C. It contains particulars of a great many items of second-hand apparatus at very low prices, and will be sent free on application.

× × × ×

DEATH OF MR. R. W. T. MORRIS. We regret to note the death of Mr. Morris, of Nirvana, Ivybridge, which occurred on the 6th inst. Mr. Morris, who was a retired Indian judge, was a skilful amateur photographer, and an occasional contributor to the columns of *Photography*. His death at the age of 72 was due to peritonitis.

NOTES ON CARBON.

THE writer can say from long personal knowledge of Mr. A. C. Braham, the head of the technical staff at the Autotype Works, that what he does not know about the carbon process is not worth bothering about. For five and twenty years Mr. Braham has been at the Ealing factory, working carbon and thinking carbon. He has demonstrated it before a great many audiences, and has at the same time demonstrated how completely he had familiarised himself with the process. That being so, when Mr. Braham put pen to paper to make a booklet on the autotype carbon process, it may be taken for granted that it will be thoroughly practical and useful to the carbon worker. And so, indeed, is the little book, which can be got for sixpence from the Autotype Co., of 74, New Oxford Street, London, W.

Those of our readers who are thinking of working what all are agreed is the most beautiful of photographic processes will find this book just the guide they need. Explaining first, clearly and briefly, the principles on which the process rests, its author proceeds to describe how it is worked, to point out where the inexperienced may perchance have trouble, and how it can be avoided.

Much prominence, we note, is given to the method of sensitising with a solution containing spirit, which the company has recently introduced, and we are glad of this. The method is likely to have a great influence on the popularity of the process in the future, as it enables the tissue to be sensitised only a few minutes before it is wanted for use, and so ensures its freshness and prevents waste.

The book, however, is more than a beginners' guide, and we feel sure that no experienced carbon printer will read it without feeling that by so doing he has added to his knowledge of the process. It is an excellent sixpennyworth.

TENDERS FOR CHEMICALS AND GLASS for photographic purposes are invited by the Ordnance Survey. For particulars application should be made to the Officer in Charge of Stores, Ordnance Survey Office, Southampton.

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MOUNTAIN PHOTOGRAPHY is well represented by a collection of a hundred and eighty photographs by members of the Alpine Club, which are on view at the club premises, 23, Savile Row, London, W., up to May 30th.

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MANCHESTER will have the next Northern Photographic Exhibition. It will be held in the City Art Gallery in January, 1909. Mr. S. L. Coulthurst, of Broad Oak Road, Worsley, near Manchester, is honorary secretary.

THE TITLE COMPETITION.

An Extra Award.

OWING to the necessity for going to press earlier than usual last week with part of the paper, we were unable to correct the announcement of the awards in this competition as we wished to do. Will competitors therefore note that the total entrance fees exceeded the guaranteed amount of the prizes, making in all the sum of £16 10s. available for division? This increased the first prize from £5 to £5 10s., and allowed an extra award of £1 to be made.

The extra award of £1 is won by C. T. Baugh, of 104, Upper St. Mary's Road, Bearwood, Birmingham, for "Silent Symbols."

SAVING OVER-PRINTED PHOTOGRAPHS.

UNTIL the other day, writes Mr. F. M. Sutcliffe in the "Yorkshire Post," I had never tried to save over-printed silver prints, for I had an idea that any attempt to remedy spoilt bromide or silver prints would be fatal to their permanency. Perhaps this is so, and it may be as well to test by keeping to ourselves any prints we try to redeem.

Some bromide prints which I made last week turned out to be too dark when finished. I thought I would try to reduce them in the same way as a negative. I found no difficulty, and now that the prints are dry again, no one would know that they had been reduced. I am keeping them to see whether they fade or turn yellow, or play any pranks of any sort.

Again, I had some prints to make on a certain self-toning paper for a customer. Among these was one which was under-printed, and two which were decidedly too dark—one was, indeed, very black. These were fixed with the rest, but the pale print was taken out in five minutes instead of eight, and the two dark prints were left in fifteen and thirty minutes respectively. Except from the pencil marks I made at the back it is impossible to distinguish these two prints from the rest.

A PORTRAIT HEAD properly illuminated should not appear in bold relief against the background. To a certain degree, relief is an admirable quality in portraiture, but only to a certain degree. An excess of relief is unpleasant. The object of a picture is not to give stereoscopic effect. A portrait is to be represented as on a plain surface, not as if suspended in mid-air.—"Bulletin of Photography."

ZOO PHOTOGRAPHY.

THOSE who have been readers of *Photography* for a few months will remember some fine examples of photography at the Zoological Gardens by Mr. Wastell. That authority has been writing on the subject in "American Photography," in which he tells us that his favourite camera for this sort of work is one of the reflex pattern. It is absolutely essential to use such a pattern unless the range of work is to be severely restricted. He has a fancy for trying to secure small animals and birds, or the heads of larger ones, so that they reasonably fill the plate. To do this necessitates working at close quarters, and demands most accurate focussing. It must be remembered, too, that the objects are moving, that the opportunity for a successful exposure is but momentary, and that a large working aperture (with consequent shallowness of definition) is essential. This large aperture, by the way, usefully suppresses detail in the backgrounds in the case of animals in captivity, often not only aggressive, but unsuitable.

He uses a focal plane shutter on account of its high efficiency, and as a further safeguard against under-exposure uses rapid or extra rapid plates, invariably backed. In diffused summer light a focal plane exposure of 1/40th second at f/6.3 (nominal) on a rapid plate will give a properly graded negative of the vast majority of outdoor subjects. The word "nominal" is applied to the aperture as a reminder that when working at very close quarters the necessary extension of the camera makes the working aperture considerably less than its marked value. A long-focus lens, or even a telephoto, is often very useful; but if the camera is used only in the hand, consequent difficulties arise. A lens of very short focus should not be used. It gives too much depth of definition. At long range it renders subjects on too insignificant a scale, and at close quarters exaggerated drawing is inevitable.

For subjects at some distance away, when the lens is working at or near the infinity mark, the diaphragm may safely be narrowed down to f/11 or f/16, while in the case of eagles under cover, for example, not only should the lens be opened to its full aperture, but the slowest run of the focal plane should be utilised. With such precautions the negatives obtained should not only yield good contact prints, but should be admirably adapted for producing good enlargements and lantern slides.



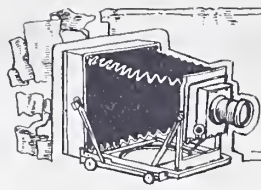
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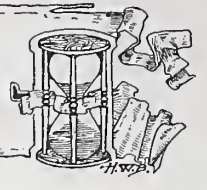
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FORTHCOMING EVENTS



MONDAY, MAY 18TH.

Bowes Park & D.P.S. "The Wonders of the Heavens." C. P. Butler.
Oliver Goldsmith P.S. Arbrook Common.
Bradford P.S. "Baldon Moors."
Walthamstow P.S. "Nature Mounts and the Choice of Colours." T. R. Nunn.

TUESDAY, MAY 19TH

Batley & D.P.S. Kirk Burton.
Edinburgh P.S. Melrose or Leaderfoot.
Manchester A.P.S. Discussion on Oil Prints.
Royal P.S. "Architecture in Ireland." Chas. H. Oakden.
Nelson P.S. "Caroon." A. Plunkett.
Hackney P.S. "Lantern Slide Making." F. E. Roope.

WEDNESDAY, MAY 20TH.

C. Tech. Coll. P.S. "The Design of a Photographic Objective." Val. H. Mackinney. H. C. Patey.
Tunbridge Wells A.P.S. Members' Lantern Evening.
N. London P.S. "Oil Printing." Dr. A. R. F. Evershed.
Balham C.C. Prints from Outing to Gravesend.

THURSDAY, MAY 21ST

Midlothian P.A. Architectural Photography. E. L. Brown.
Glasgow & W. of S.A.P.S. Strathyre.
Ilford P.S. Ayot.

Societies will have their meetings announced here if the syllabus is sent to us at the beginning of the Session or from time to time.

THURSDAY, MAY 21ST (Continued).

L. & P.P.A. "The Donisthorpe Process." F. Donisthorpe.
Handsworth P.S. "The Donisthorpe Process." F. E. Bill.

SATURDAY, MAY 23RD.

Affiliated Societies. Outing to Ayot
Batley & D.P.S. Thorrhill Church and Rectory.
Ashton under-Lyne P.S. Broadbottom.
Leeds C.C. Hull.
Coventry P.C. Rugby, Bilton, and Dunchurch.
Bolton A.P.S. Adlington.
Rugby P.S. Bilton, Dunchurch and Thurlaston.
Dennistoun A.P.A. Calerwood Estate.
U. Stereoscopic S. Weke Valley.
Wallasey A.P.S. Raby.

MONDAY, MAY 25TH.

Cripplegate P.S. Annual Meeting.
Gravesend & D.P.S. "Time Development." W. F. Slater.
Bournville & D.P.S. "Pictorial Composition." C. F. Thompson.
Wallasey A.P.S. "Practical Demonstration on Autochromes." W. H. Tomkinson.
Southampton C.C. Stereoscopic Photography. W. H. Trigg.

The Advanced Worker Competition.—Awards for April.

EVERY month we hold two general competitions—one for beginners and one for advanced workers—in which plaques, and medals, and certificates are offered. The rules are printed more than once, but cannot be given every week. They are to be found in last week's *Photography and Focus*, on page 20. Although the competition closed before the union of the two papers, the entries last month were by far the largest on record, so much so that, although no time has been lost, there will necessarily be some little delay in getting the pictures returned. However, we hope to have all those that were accompanied by stamped wrappers or labels sent back by the end of the month.

The following is a complete list of the awards for April:

First prize, *Photography* silver plaque, A. J. Holmes, 12, Kitchener Road, Selly Park, Birmingham, for a picture entitled "The Last Line."

Second prize, *Photography* bronze plaque, Miss Irene E. How, of 39, High Road, Lee, S.E., for a picture entitled "Flight of Fancy."

Third prize, *Photography* bronze medal, A. W. Walburn, Upper Park Road, West Hartlepool, for "Pavers."

Certificates of honourable mention were awarded to W. F. Holdsworth, of 68, Beckenham Road, Beckenham, Kent, for "Of the Order of St. Dominic"; to Sydney H. Carr, of Arkleby, St. Ives, Cornwall, for "In a Cornish Church, Lelant"; and to J. E. T. S. Hilton, 74, North Side, Wandsworth Common, London, S.W., for "Star of Bethlehem."

THE KODAK IN SOUTH AFRICA.

THE opening of a series of Kodak exhibitions in India was recently chronicled in our columns. We now have to note a similar enterprise in South Africa; the South African papers commenting on the keen interest which these exhibitions have aroused.

The chief feature at each is a series of very fine enlargements on the different brands of Kodak bromide paper, the original negatives being obtained in Kodak cameras on Kodak N.C. film. The Kodak legend is therefore driven home from one end to the other, and the capabilities of the company's apparatus and material to provide for the whole of the photographers' wants from exposure to exhibition are unmistakably demonstrated. No doubt the enterprise will lead to a large extension of the trade in that part of the world, where as our "Greater Britain" competition has just shown, there are a great many amateur workers.

A feature of the exhibitions which should not be passed over is the frequent demonstration of the Kodak daylight system of development, which by making the darkroom no longer a necessity, is responsible for a great widening of the circle of amateur photographers. We hear that the tank developer and its results came in for a great share of attention.

ROYAL INSTITUTION. Dr. Alexander Scott, on Thursday next, May 21st, at 3 p.m., will deliver the first of three lectures on "The Chemistry of Photography."

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DEATH OF "WALKER MILES." The death is announced of Mr. E. S. Taylor, who, as "Walker Miles," was the author of more than thirty books of field-path rambles, and the editor of the *Ramblers' Library*. Numerous walking clubs owe their inception to "Walker Miles," and his works have been the means of saving many public footpaths from disuse or actual obstruction. Many of his books were illustrated with photographs by Mr. A. Bedding.

THE GLASGOW SOUTHERN PHOTOGRAPHIC Association, at its annual meeting, elected the following officers: President, Robert Ure; vice-president, James H. Pollock; treasurer, Edward J. Grant; librarian, J. Veitch; council, Messrs. Horn, Wallace, Merran, Kemp, Young, and Wilson; and honorary secretary, R. Lindsay, of 189, Allison Street, Glasgow. The exhibition for next year was fixed for January 19th to 30th.

X X X X

SHOWING AUTOCHROME PLATES. Mr. Greenwood, at the "L. and P.," had a very convenient apparatus for showing his Autochrome specimens. This was a retouching desk with a revolving carrier, and the positive was put in the carrier and covered with a sheet of fine ground glass to diffuse the light. The reflecting mirror had been closed in by means of a black material, thus all light was cut off except which came through the transparency, and when viewed upon the mirror this showed up in all its brilliancy of colour, even when viewed by an ordinary incandescent gas burner.

"CRITERION"

When one hears that a certain firm are the largest purchasers in the country of a particular product which is used in the course of manufacture, it is very properly assumed that the purchasers of that product enjoy a larger sale of that class of goods than any of their competitors.

P. O.

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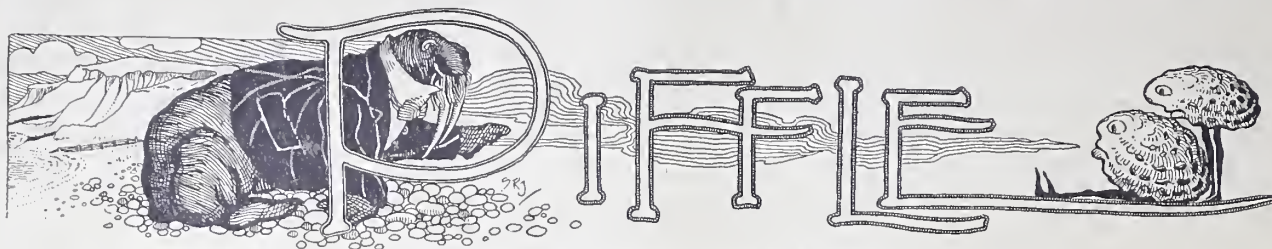
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"The time has come, the Walrus said, to talk of many things."

AT the present moment I cannot make up my mind whether I am a Solomon or a hollow fraud. By the same post two letters have reached me. The writer of one remarks, "My idol is tottering, and I am losing faith; try, oh try, to restore your crumbling reputation." I need hardly add that his idol means me; and that it is his letter as a whole that makes me suspect myself of being a hollow fraud. On the other hand, the writer of the second letter appeals to me for advice in the most confident manner, describing himself as my ardent admirer, although I am not altogether satisfied when he writes, "Your advice will be amusing even if of little value."

* * *

Now, it seems to me of little use offering advice without previously attempting to restore my crumbling reputation; so I will first proceed to tackle the dissatisfied gentleman and endeavour to knock him into the middle of the week after next.

* * *

What is the head and front of my offending? He charges me with having said that photographers can dispense with cameras. To be on the safe side I deny having said anything of the sort. But, assuming that I did say so (which is probably true), I am going to put it to my readers that my correspondent drew entirely false and idiotic conclusions from the statement. It appears that he is a dispensing chemist, and when he read that photographers could dispense with cameras he promptly dismissed his two assistants. When a customer came in with a prescription to be made up, he was asked to call again in two hours. The chemist then laid the prescription on the dispensing counter, and placed beside it a Sanderson camera. At the end of half an hour, as nothing had happened, he added a Panoram Kodak; and finally he produced a nondescript half-plate reflex to lend a hand. When he finally had to make up the prescription himself, he turned on me for having misled him into thinking that the cameras would dispense the prescription for him.

* * *

Was ever a charge more baseless? Did I say the cameras would dispense? No. A thousand times, no. Ten thousand times, no. I said (if I said anything) that he could dispense with cameras. And so he could. He admits having done it. Could he have done it better *without* the cameras? Did he do it any worse *with* them? Bless my soul! Perhaps the man would grumble at me if I said that he could dispense with the toothache.

* * *

Feeling that my reputation now shows no crumbling tendencies, I pass on to give advice to my confident friend. His is a sad, but perhaps not uncommon, case. He wished to take a photograph of an old cottage in a village street. Being free from any silly ideas about being able to "dispense" with a camera, he rigged up that harmful, unnecessary article with its glaring eye directed full at the cottage. At this critical moment there suddenly bustled upon the scene an "ugly old red-nosed jossor." It pains me to use such terms, but they are those of my correspondent, and as he gives me no other information as to the person I am obliged to accept his description. The jossor enquired whether my friend wanted to take the cottage. Some people would have deliberately misunderstood him and pretended that the query referred to a desire to rent the place as a tenant. But my friend simply answered that it was his intention to photograph the cottage with the aid of his camera and a dry plate. Whereupon the three-adjuncted jossor demanded a fee of half a guinea for permission to do so.

* * *

My friend explained that he was not desirous of acquiring the freehold of the property, and, in a burst of splendid

generosity, offered sixpence for a shot. The ugly, etc., jossor was goaded to frenzy. Aided by the village idiot, and reinforced by a crowd of villagers that would have disgraced a comic opera, the jossor proceeded to cut frantic capers in front of the camera. My friend was seized with a burning desire to duck the jossor in the horsepond, but, fearing subsequent proceedings at the instance of the Society for the Prevention of Cruelty to Animals, he refrained. Ruefully packing up his camera he fled the scene. And now he pathetically appeals to me to know what I would have done in like circumstances.

* * *

Were it not for fear of my reputation crumbling again, I should be tempted to say I don't know. But the description of the jossor as rednosed at once shows that he possessed a feature that might profitably have been punched or pulled as a preliminary hint that the fun was about to commence. This might have been followed up by knocking out the missing brains of the village idiot, a performance succeeded by a general assault on the rest of the crowd, employing the tripod as a triple lance. I can confidently affirm that a tripod spike well and truly jabbed between the third and fourth vest buttons of a capering villager has a most disconcerting effect. Again, it is an easy matter to obtain a clear ring of respectable dimensions by grasping the bottoms of the tripod legs and swinging the whole apparatus round in a circle. Once round is quite enough. It does the camera some harm, but it does the crowd more.

* * *

I think I have now fairly re-established my reputation even in the eyes of a dispensing chemist, and I will therefore proceed to burst forth in song. A weekly paper has been publishing some poems under the title "Orf"; and as none has hitherto dealt with photography, I intend at once to rectify the omission by writing one myself.

* * *

I'm orf!

Orf were photography ain't!

For I'm precious nearly sick
Of plates both slow and quick;
And yer hamidol and sich
Away I'd like to pitch.

My prints is allus wrong—
Too weak, or else too strong.

Whatever lens I git,

It won't work right a bit;

Try and try—

All my eye!

Call photography a Art?

It's nigh broke my bloomin' 'eart!

I'm orf!!!

THE WALRUS.

SUBSCRIPTIONS.

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PHOTOGRAPHY

A JOURNAL FOR EVERY CAMERA USER.

EDITED BY R. CHILD BAYLEY.

PUBLISHED WEEKLY.

MAY 26TH, 1908. TUESDAY. No. 1,020. Vol. XXVI.



THE BOILING POT, VICTORIA FALLS, ZAMBESI RIVER.

BY J. HERBERT HARDY.

This fine picture of the greatest waterfalls in the world took the second prize in the "Greater Britain Competition."



EDITORIAL



Greater Britain Pictures.

Our illustrations this week are almost without exception the work of readers in far-off lands. When it is remembered that the competition only covered the *Photography* and not the *Focus* readers in Greater Britain—and it is only fair to assume that the circulation of *Focus* beyond Europe may be compared with that of *Photography*—some idea of the many out-of-the-way corners of the earth that this issue will make its way into may be imagined. We feel sure, too, that our home readers will view with interest the diversified landscapes and diversified models that their fellow photographers in the colonies and abroad have as their pictorial material; and many will doubtless try and fancy the way they themselves would treat some of the subjects which we have reproduced.

A Wide Angle Dodge.

Some readers of *Photography* and *Focus* may find themselves this summer trying to photograph some scene, an interior perchance, which will not quite “come” upon the plate they are using. If they do not mind a dividing line in the picture, such a difficulty can often be overcome by the device of making two exposures without moving the camera. One is made with the lens pushed as far as possible to one side of the plate, and the second with it pushed as far as possible to the other. There will be a good deal in the two negatives that is the same, but there will also be a good deal in each that is not in the other. Moreover, the drawing of the parts that appear in both will be the same, so that there will be no incongruity when the two prints are trimmed and mounted side by side. It will not be absolutely the same, it is true, because the view point, which is at the lens itself, will be shifted to the extent to which the lens itself is shifted; but nothing more. If we could fix the lens and shift the back carrying the plate, even this trifling difference would be avoided; but we cannot. Fortunately, the alteration is so slight as to be quite negligible.

Steam and Smoke.

The winning photograph in the railway train special subject competition, which we reproduced last week, served excellently to show the pictorial effect which can be secured with the aid of steam and smoke when circumstances are favourable, and when the photographer is alive to his opportunities. The column of dense smoke which was being driven out of the funnel was not only well formed to suggest the force that

impelled it, but the cloud of white steam behind it was exactly what was wanted to accentuate the black pillar. These things were not under the control of the photographer, we presume, although a little negotiation with drivers and firemen is not time wasted by the train photographer; but, at any rate, the photographer appreciated them when he saw them, and the result is the most effective picture of a train that we have seen produced by photographic means.

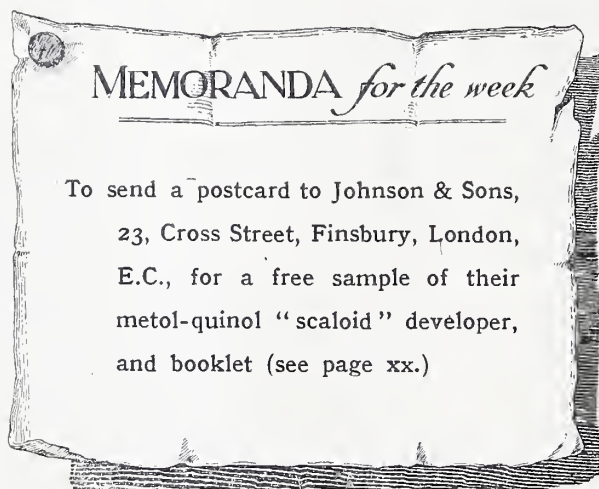
Rickety Tripods.

A tripod with the rickets may spoil all the pleasure of a camera outing. It is just bad enough generally to be a great nuisance, yet not bad enough to justify getting rid of the thing and buying another. It is put up with. Now, it must often happen that the photographer himself is to blame for the unsteady character of the stand. Most tripods to-day rely for their steadiness on the spring of the legs, and as this gets weaker with time the leg as a whole becomes more flexible. With care, it will be a long time before a properly made tripod becomes very shaky from such a cause; but if it is habitually left with the legs attached to the head they soon lose much of their original tension. In fact, in a week or two they may require a regular “set,” and the steadiness of the tripod will be gone for ever. Whereas if after use the tripod is taken to pieces and strapped up flat, the legs will be appreciably straight and stiff after years of work with it.

A Difficulty and a Suggestion.

“The Walrus” recently described a case that had been put to him of a photographer who pointed his camera towards a certain picturesque cottage and proceeded to get ready to photograph it. The proprietor of the cottage forthwith appeared and capered up and down in front of it with a view to prevent the photograph from being taken. Whether the incident actually happened or not, we cannot say, but we happen to know that the experience was at least communicated to our contributor, who suggested, as is his wont, violent proceedings against the caperer.

Another method which would surely have been more effective and less risky would have been either to use the smallest stop, or, better still, to have extemporised one much smaller than those usually provided for the lens—say $f/512$, which would require just four thousand and ninety-six times the exposure of $f/8$. If $f/8$ needed



the twentieth of a second. $f/512$ would therefore require about three and a half minutes. If a six times iso. screen had been available, this exposure might have been lengthened to about twenty minutes; but probably this would not be necessary. Provided the proprietor of the cottage was energetic enough, an exposure on his dwelling with such a stop would yield a nice sharp picture of the cottage without the slightest sign of the misguided individual who adopted this quaint plan of protecting what he believed to be his rights. A stop that would necessitate an exposure of a minute would very likely have been sufficient to obliterate him.

There is nothing new in this suggestion; it is one that has often been adopted in street photography; stopping down so as to prolong the exposure to an hour or so, and ignoring the traffic entirely. When the plate is developed, the street appears quite empty.

CARPENTER'S CURE.

You've met with Johnny Carpenter—that fellow with a wart?

He's meek and inoffensive, but a very decent sort. He used to be a terror in the trumpet-blowing way, But he quite reformed last winter, and we hope it's come to stay.

He used to lecture bumptiously to clubs of small repute, Where nobody knew anything (for J. was most astute). "Exposure" was his topic, and he'd jaw and jaw and jaw, And enjoy himself enormously whilst laying down the law.

One night J. C. was lecturing (I dare not tell you where),

But several men of eminence it chanced were also there. And when J. C. had finished, they arose up one by one, And contradicted everything that he had said and done.

They tore his arguments to shreds, they smote him hip and thigh,

They all but said his lecture was a big and lengthy lie. They told him his experiments were simple tommy-rot, And what he'd said they proved was so, they'd really proved was not.

And when J. C. was pulverised, the President arose, And said that Mr. Carpenter might answer if he chose. But Johnny said, in trembling tones, he had to catch a train

And I rather think that lecture won't be heard of much again.

The Largest Photographic Mart in the World.

DOES the reader appreciate the fact that the combination of *Photography and Focus* has created what is by far the largest mart in the world for second-hand photographic apparatus and material? The little private advertisements in "Focus" were a very prominent feature of the paper, and hardly less so in the case of *Photography*. Now that the two are added together page after page will be seen crowded with particulars of every kind of apparatus for sale or wanted. The mart is indeed well stocked. Nor are the customers wanting. What should we think of a business house that distributed thirty or forty

A Word for All.

We wish to draw the attention of our readers, far and near, to the open letter to them which we print on page 55 this week. The matter is one which can only be carried through by a combined effort of all those interested. Let us ask them, therefore, not to wait with the thought that someone else will deal with the place they know best, but act on their first impulse and do a little to help their fellow photographers. It will only cost a few minutes of time and a penny stamp.

Looking at Pictures Upside-down.

It is supposed to be the worst that can be said of a fuzzy photograph, when it is remarked that it looks better upside down; and the actual hanging of a picture upside down is supposed to be a common occurrence at the Photographic Salon, although we believe such statements to be mere would-be-comic legends. The upside-down aspect of a picture is not to be ignored, however. For one thing, every photographer, except the user of a reflex camera, composes his picture upside down on the focussing screen; so that either its pictorial qualities can be gauged while it is in that reversed position, or else there must be some mental reversal which enables us to see it in fancy the right way up.

Now we do not advocate hanging pictures upside down as a practice; but it may be very useful if at times we study our pictures in that position. A picture, as something more than a mere representation of things, must be agreeable in itself. A pretty subject perfectly photographed may be anything but a pretty picture. The picture, as a picture, must have certain qualities which are not of necessity to be found in the subject. For one thing the arrangement of the different masses of light and shade of which it is composed, their shape and relative tones, must be such as shall create a pleasant impression, quite apart from and beyond the particular thing which they happen to represent. Now these are matters which are not affected by turning the pictures upside-down. In fact, they are more easily studied in that position, as Mr. Sutcliffe recently pointed out in "The Yorkshire Post," because while they are looked at in that way the subject itself is lost sight of. By all means, let us look at and enjoy our pictures the right way up; but recognise the fact that a good composition will have an agreeable effect whichever way up it is seen; and that if pictures will not stand this test, they may be perfect technical photographs, but the pictorial side of their production is weak.

thousand catalogues amongst its customers every week. Yet that is what the small advertisement department of *Photography and Focus* does, and the result is that sixty or eighty thousand eyes (we make no allowance on the score of monocular readers) scan the columns of goods for sale, and business is of the very brisk kind.

No Reader should be Satisfied

until he has not merely read the paper, but has run through the miscellaneous advertisements at the end. The very apparatus he has been longing for may be advertised at a bargain that very week.



IS IT POSSIBLE TO HASTEN FIXING?

Important Experiments and their Results by the Lumière Brothers.



AN interesting paper was read by MM. Lumière and Seyewetz before the French Photographic Society on April 17th, which threw a considerable degree of light upon a certain question of fixing plates and papers.

As long ago as 1868 Mr. John Spiller suggested that, instead of hyposulphite of soda, hyposulphite of ammonia might be used for fixing, as the silver bromide dissolved more rapidly in the latter salt, and the great solubility of the hyposulphite of ammonia made it much easier to wash out of the film. Hyposulphite of ammonia deliquesces very rapidly; but a solution of it is easily prepared by those who want to use it for fixing purposes, by adding a solution of ammonium chloride (sal-ammoniac) to a solution of ordinary hypo.

The questions which MM. Lumière and Seyewetz set themselves to answer were: (1) What are the best proportions of hypo and ammonium chloride? (2) what is the comparative solubility of silver bromide in the different solutions? (3) what is the stability of the double salts which are formed by them on fixing? (4) how soon are such fixing baths exhausted? (5) and how far is the washing accelerated by substituting the mixture for a plain solution of hypo? These questions, it will be seen, cover the whole ground of the suitability or otherwise of the mixture for fixing purposes.

The reply to them is summarised by saying that, although in a suitable bath the fixing is very rapid, the experimenters do not recommend the mixture in place of plain hypo, because the salts which result when a plate is fixed in the mixture are very unstable. The result is that they would affect the permanence of the images fixed in them if by any chance the washing was not complete. The most rapid fixing took place when the hypo had added to it one-fourth its weight of ammonium chloride—a proportion which fixed a plate three times as quickly as did the plain hypo solution. But this was affected greatly by the strength of the hypo solution. In the case just mentioned it was three ounces to the pint (15%). As the hypo solution used is stronger, so the gain in rapidity is less and less, until when the hypo has a strength of 40% it fixes as rapidly without as with ammonium chloride.

So it seems that these scientific workers have explored a

bypath for us, and have put up a board marked "No thoroughfare." In future, if we are advised to try a little sal-ammoniac in our hypo, we shall know that it is not to be recommended. Hypo, known to Fox Talbot before he discovered Talbotype in 1839, remains to-day the universally used fixing material. Amid all the changes in photographic practice, this one salt has held its own.



Tom's Young Son (see page 56).

THE WEEK'S MEETINGS.

MONDAY, MAY 25TH.

Cripplegate P.S. Annual Meeting.
Gravesend & D.P.S. "Time Development." W. F. Slater.
Bournville & D.P.S. "Pictorial Composition." C. F. Thompson.
Wallasey A.P.S. "Practical Demonstration on Autochromes." W. H. Tomkinson.
Southampton C.C. Stereoscopic Photography. W. H. Trigg.

TUESDAY, MAY 26TH.

Wallington C.C. The Surrey Survey.
Birmingham P.S. "Printing without Light." F. W. Donisthorpe.
Hackney P.S. "Trimming and Mounting." A. J. Lingford.
Royal P.S. "Securing Uniformity in Ozobrome." Thomas Manly.
Nelson C.C. "Ferro-Prussiate Paper." J. E. Ashworth.

WEDNESDAY, MAY 27TH.

Lincoln A.P.S. Grimsby Docks.
C. Tech. Coll. P.S. "History of Colour Photography." R. C. Gale.
South Essex C.C. Slides.
Everton C.C. Curio Night.
Leeds C.C. Portfolio Evening.
North Middlesex P.S. Gum-hichromate. C. Wille.
Boro. Poly. P.S. "Faking, or what the other man can't do." A. C. Tolputt.
Bolton A.P.S. Adlington.
Darlington C.C. Newcastle.

THURSDAY, MAY 28TH.

Wimbledon & D.C.C. Members' Evening.

THURSDAY, MAY 28TH (Continued).

Nottingham C.C. Southwell.
Handsworth P.S. "Bromide Printing and Toning." E. G. Collas.
L. & P.P.A. "Sinop." S. G. Yerbury.

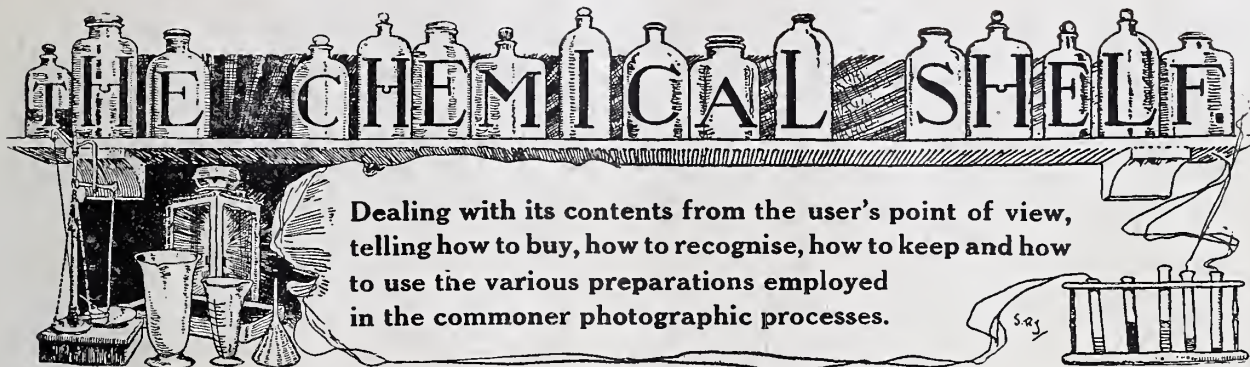
FRIDAY, MAY 29TH.

Balham Camera Club. "Toning Bromide." M. Stevens.
Manchester A.P.S. Smithills Hall.

SATURDAY, MAY 30TH.

Nottingham C.C. Southwell.
Hull P.S. Lincoln.
Southampton C.C. Hamble and the Marshes.
South Suburban P.S. Holmwood and Dorking.
Woodford P.S. Oxshott, Surrey.
Blackpool & F.P.S. Green Drive, Lytham.
Wallasey A.P.S. Hoylake.
U. Stereoscopic S. The Vale of Middlesex with the Bowes Park and D.P.S.
Chelsea & D.P.S. Ewell and Chessington.
Liverpool A.P.A. Bamford.
Horwich I.A.P.S. Liverpool.
Halifax C.C. Wade Woods.
Batley & D.P.S. Cawthorne.
South London P.S. Oxshott Woods.
Southend-on-Sea P.S. Canewdon.
Darlington C.C. Newcastle.
Preston C.C. Brunton.

Societies will have their meetings announced here if the syllabus is sent to us at the beginning of the Session or from time to time.

**IMOGEN SULPHITE.**

Imogen sulphite is a pinkish white powder, fairly soluble in water, a solution of about eight per cent. being easily made. It keeps well both in the dry state and in solution. It is made by the well-known Agfa firm, and being prepared specially for photography, is not likely to be anything but pure.

Its use is as a developer for negatives, and, as its name implies, it contains within itself the sulphite necessary for its preservation in solution. The formula given below is the strength recommended by the makers, and should not be exceeded; but the solution may be more dilute without harm, if this is preferred.

FORMULA.

A.—Imogen sulphite	...	...	1 ounce
Water (lukewarm)	...	...	12 ounces
B.—Sodium carbonate (crystals)	...	...	1 ounce
Water (hot)	...	...	2 ounces

Both are ready for use as soon as cold. One ounce of A, one ounce of B, and two ounces of water form the developer for use.

IODINE.

Iodine is sold in the form of shining blue-black metallic looking scales, which stain the fingers or paper almost as soon as they come into contact with either. It keeps very well in a stoppered bottle, although it has a tendency to make the stopper stick. Its solutions also keep perfectly. Iodine is not likely to be met with in too impure a form for photographic use.

Although iodine has been extensively used in photography ever since the days of Daguerre, it is not often that the photographer has had to do directly with it. To-day, practically all dry plates contain iodine in conjunction with silver, but the only use to which the photographer puts the iodine itself is for bleaching prints in the Blake-Smith process, and occasionally as a reducer in conjunction with potassium cyanide.

Iodine is only feebly soluble in water, too little dissolving to be of any use in that form, but it possesses the peculiarity that it will dissolve at once in water in which potassium iodide has been dissolved. It is also soluble in alcohol forming "tincture of iodine," in which form it can be purchased of any chemist and druggist, when the solid iodine itself may not be obtainable.

A solution, as given below, may be used to bleach bromide or gaslight prints for sulphur toning, and is not without its good points. Unfortunately, however, iodine has a very powerful action upon starch, turning it into a blue-black compound, iodide of starch. Practically all paper contains starch, and so when a print is put into a solution of iodine to be bleached, while the image bleaches, the paper itself turns black. The result is that after the iodine has done its work the print has to be placed in a solution of sodium sulphite to bleach the paper again before the image itself is darkened by means of the sulphide. Hence the solution of potassium bromide and potassium ferricyanide has now very generally taken its place, because, with this latter, there is no need for the intermediate sulphite bath, or any other.

The iodine-cyanide reducer described below has a great merit when applied to bromide or gaslight prints. Most reducers when applied to such prints, if they are only required to reduce the image partially, alter its tone. This formula does not. Hence, the iodine-cyanide reducer may be

used locally with a brush, to lighten parts of a print, to take other parts out altogether, or to form vignettes, an application which, in the hands of workers like Mr. Wild, of Tunbridge Wells, has been very effective. It should be pointed out that the cyanide solution is intensely poisonous, and that the reducer has a powerfully corroding effect upon brushes, so that only cheap ones, and those in which there is no metal, should be used.

FORMULA.*Bleaching Solution for Sulphur Toning.*

Iodine	...	...	40 to 45 grains
Potassium iodide	...	...	110 grains
Water to	...	...	10 ounces

This is Blake-Smith's formula. The iodide should be dissolved in two ounces of water, then the iodine added to it, and when this is dissolved the rest of the water may be poured in. The solution can be used over and over again, more iodine being added to it from time to time to replace what is used. The colour is a fair guide to the strength of the solution. The prints may be transferred, without washing, after bleaching the image to a five per cent. solution of sodium sulphite to bleach the paper.

Iodine-Cyanide Reducer.

Saturated solution of potassium cyanide in water	...	...	1 dram
Saturated solution of iodine in alcohol...	...	...	½ "
Water from ½ ounce to 2 ounces according to the rapidity of the action that is desired.	...	...	(Wild's formula.)

-IRON AMMONIO-CITRATE.

This substance is the basis of most if not all of the "blue print" processes. There are two forms of iron ammonio-citrate which are on the market. One has the appearance of shining scales of a brown colour, and the other of scales of a green tint. The latter, which is known as "viride," is more suitable for photography, as the papers prepared with it are more sensitive; but the brown is, as a rule, more easily obtained. Both salts keep very well in the dry state, and their solutions keep tolerably well in the dark, but it is better only to dissolve just what is wanted at the time. The green salt must be kept well stoppered, or it will deliquesce and go to a pasty mass. There is not likely to be trouble in buying the ammonio-citrate from impurity or adulteration.

Distilled water is to be preferred in making up solutions of iron ammonio-citrate, and it should be put in a clean bottle with a clean cork, as the solution is easily upset.

FORMULA.

A.—Iron ammonio-citrate	...	...	2 ounces
Distilled water	...	...	4 "
B.—Potassium ferricyanide	...	...	1½ "
Distilled water	...	...	4 "

One ounce of A, one ounce of B, and two ounces of water are mixed just before use, and the mixture is spread quickly and evenly over well sized paper with a clean sponge or flat brush. It is then dried in the dark, or at least out of daylight, and the quicker the better. After printing, it is simply washed in water.



Big Pictures

from Little.



THE two illustrations reproduced on this page will serve to show better than a long article by itself could do the wonderful power which the skill of

the optician puts in the hands of photographers. It is possible to-day to get a camera which will go, literally, into the waistcoat pocket, which will take plates not much larger than a couple of postage stamps, and yet will yield negatives on those plates which will stand almost indefinite enlargement.

The well-known Blocknote camera of Messrs. Gaumont has furnished these capital illustrations of our point. The little group of Polynesian beauties is reproduced the exact size of the original negative, but of course much of its sharpness is inevitably lost in the process of reproduction. What exquisite definition it possesses, however, is shown unmistakably by the larger picture, which is simply an enlargement of one of

enough for use in a hand camera. When all are combined, as in this instance, the result is a remarkable example of the point that present-day

hand camera work has reached, and a wonderful testimony to the quality of the Blocknote itself. We congratulate both the skilful amateur, who obtained the result, and Messrs

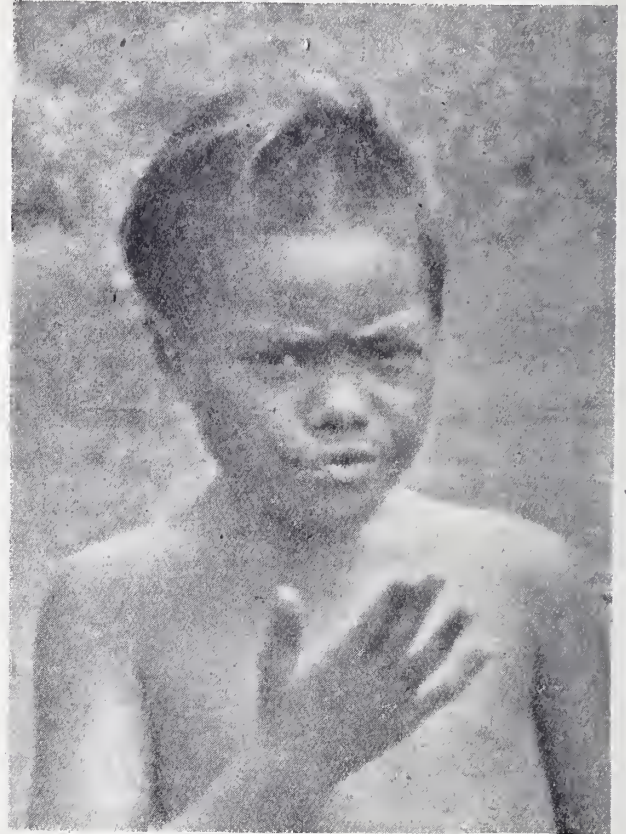


Print from the entire little negative, same size.

the tiny heads in the group. The original will have to be looked for very carefully, if it is to be discovered; yet it is there, and there with plenty of detail.

Had the whole picture been enlarged on the same scale, it would have made a photograph over 30 x 20 inches, and this, if framed and hung on a wall and viewed from the proper distance for seeing such a picture comfortably, would have looked absolutely sharp. The time is not very far distant when an enlargement of such a size from a quarter-plate picture was looked upon as something wonderful; yet here is such a picture from a negative not much more than one-fourth the size of a quarter-plate.

Such definition is not due to any one feature, but to all. Primarily, of course, the lens must be capable of giving it. But such a lens would demand exceptional accuracy in the camera, if full advantage was to be taken of its excellence. Then again, the plate must be one of fine grain, although fast



A small part of the little negative, in the next column, enlarged.

Gaumont, by whose apparatus it was obtained. It is only fair to them to state that it is not exceptional. We have seen other examples equally striking, if not more so, but have selected this as a good one for our present purpose.

A New Colour Plate Announced—the Diophticores.

IF announcements counted for anything, the Autochrome plate would be in a poor way, the Powrie-Warner, the Krayn, the Omnicolore, the Thames, and now the Diophticores having all reached the announcement stage. As our readers know, we do not care to deal at any length with these inventions until they reach the commercial stage, and they can not only read about them, but try them if they will, so that we will content ourselves by noting that, according to the editor of "La Photographie des Couleurs," M. L. Dufay, of the firm of Guilleminot, Boespflug, et Cie., has worked out a screen plate which he calls the "Diophticores." The nature of the screen is not published in detail, but it is said to consist of microscopically fine dots of dye in

a film of gelatine, without any foreign body whatever. The grain is a regular one, and may be either in the form of lines, or cross hatching, or dots, no black filling being required. Examined in a microscope, the colouration of each dot is perfectly uniform from centre to edges, while the plate as a whole has a uniform grey tint. There are no great difficulties of manufacture, so it is said, and it is hoped that the plates can be put upon the market at a price that will allow their use to be very widespread. The exposures required are to be short, and there are to be no special difficulties or complications in their manipulation. Like the Omnicolore, these plates are to be ready "prochainement," when we hope to deal with them in a more specific manner.

SOME OF THE "GREATER BRITAIN" MODELS.



"CAN A WOMAN'S TENDER CARE." (INDIA). REV. F. GOODWILL.
A ZULU WAR DANCE (NATAL). WALTER H. HOLWAY.
A CHINAMAN AT HOME IN BRITISH COLUMBIA.
ARTHUR WEDGE.

ZULUS RESTING AFTER A WAR DANCE
(NATAL). WALTER H. HOLWAY.
AN OLD TIMER (BRITISH COLUMBIA).
ARTHUR WEDGE.

NATIVE CHILDREN (E. AFRICAN
PROTECTORATE). J. K. CREIGHTON.
A CHINESE WOMAN (SHANGHAI).
HAROLD BOWER.

INDIAN HOUSEHOLD AFFAIRS (BOMBAY). K. S. RIHAL.



HE "Greater Britain Competition" was organised during the past winter by *Photography* for the benefit of its foreign and colonial readers. Any amateur photographer was eligible to compete, provided (a) he was residing in any part

of the British Empire beyond Europe, or (b) he was a Briton living in a foreign country beyond Europe; but it was a condition also that he should not previously have taken an award in any photographic competition. Entries were limited in size to 5×4 or $5\frac{1}{2} \times 3\frac{1}{2}$, and were to be sent in unmounted for convenience of postage. Those we reproduce with mounts have been mounted by us for the purpose.

The entries were not only very numerous, but pictures for competition came from the remotest corners of the earth. A few of the countries represented are given in the following list:

Cape Colony	China
Natal	Japan
Rhodesia	Canada
East Africa	British Columbia
Transvaal	Bermuda
St. Helena	Brazil
Suez	Australia
East Griqualand	New Zealand
India	Tasmania

A selection of the prints sent in is reproduced in this issue, and will serve to show photographers at home and abroad how widely different are the conditions and subjects upon which the readers of *Photography and Focus* turn their cameras. The full list of awards is as follows:

First Prize. "Photography" Silver Plaque.

Rev. B. M. McOwan, Tai An Fu, Shantung, N. China, for a print entitled "The Black Dragon Fall."

Second Prize. "Photography" Bronze Plaque.

J. Herbert Hardy, Gwelo, Rhodesia, British South Africa, for a print entitled "The Boiling Pot."

Third Prize. A Signed Copy of "The Complete Photographer."

K. S. Rihal, Koh-i-Noor Mills, Dadar, Bombay, for a print entitled "Indians' Household Affairs."

Certificates of Honourable Mention.

E. E. H. Tyrrell, Greytown, Natal, South Africa; B. H. Woodward, Nardie, Western Australia; Walter H. Holway, 32, Devonshire Avenue, Durban; and Charles W. Darrell, 55, Cecil Street, Toronto.



THE BLACK DRAGON FALL, N. CHINA

BY REV. B. M. MCOWAN

Awarded the first prize in the Greater Britain Competition.

CHATS WITH A BEGINNER

ON THE MOVEMENTS OF A CAMERA.

II. The Focussing Arrangements.

By E. LLOYD.

NO one can handle a lens for long without noticing that in order to obtain a sharp picture with it the distance between the lens itself and the surface on which the picture is being made varies with the distance of the object. Hence the need for "focussing" the camera picture.

If we look at the picture on the ground glass of the camera, and turn the lens first towards distant objects and then towards objects nearer at hand, we shall find that the nearer the object is to the camera the greater must be the distance between the lens and the ground glass, until at last we have the camera extended as far as it will go, and are prevented by this from photographing anything any nearer.

Beginners are often puzzled by this, especially when they try to do copying. They fix up a photograph and try to focus it on the ground glass, but cannot get it sharp and large at the same time. When they put it far enough away to be sharp it is on a very small scale. To photograph an object so that its image is the same size as the original, the camera must be extended so that the ground glass is at least twice as far from the lens as it is when an ordinary landscape is being photographed.

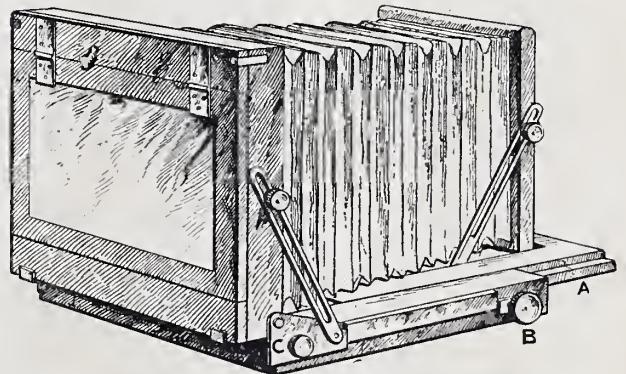
The distance between the ground glass and the lens is varied by means of the focussing arrangements of the camera, whatever they may be. In some forms of hand camera the lens itself is moved in and out by turning it round, being mounted on a kind of screw. The old-fashioned portrait lenses used to have a rack and pinion, by which they moved in and out of the tube which carried them. In the great majority of modern cameras the separation of the lens and focussing screen is controlled by moving the back of the camera, or the front of the camera, or both, along the baseboard.

In very low priced instruments this may be done merely by sliding or pushing it along, and clamping it when the correct position has been found. This is perfectly satisfactory, and focussing may be done in this way almost if not quite as well as with the more elaborate rack and pinion, but the latter method is that which is most usually met with, and is, on the whole, the most convenient.

The amateur will find that for landscape, architecture, and general photography, the handiest camera is that in which the front racks in and out. For portraiture and copying, or for work where the photographs are on nearly as large a scale as the things photographed, a camera in which the front is fixed and the back racks in and out, is to be preferred. The best landscape and general cameras have both back and front fitted with a rack and pinion.

In buying a stand camera the degree of extension of which it may be capable is important. Cameras are known as "double extension," "triple extension," etc., but these terms are very vague. The least extension that would be of much service on a quarter-plate camera would be five and a half inches, or on a half-plate seven inches, so that a double extension camera in quarter-plate size ought to have eleven inches, and a half-plate fourteen inches between the front surface of the camera front and the ground surface of the focussing screen when it is fully opened out. A triple extension half-plate camera should open out to twenty-one inches or thereabouts.

The rack and pinion focussing arrangement should work smoothly and easily; but cameras when new, although well made and satisfactory, may be a little stiff from the polish. It is better that they should be too stiff than too loose. There should be no "backlash" between rack and pinion, that is to say, as soon as the pinion is moved in either direction, it should move the camera back or front, which it is intended to drive. More important is it that there should be no slipping of the teeth, as this is a defect which will rapidly get worse, and soon leave the camera in such a condition that turning round the pinion has no effect upon it beyond making a noise. The best cameras have the racks cut askew and the pinions twisted—a form which helps to minimise "backlash" and to make the working smooth.



Sketch of a very useful form of camera for landscape and general work, as described above. A, extending baseboard for focussing. B, pinion for racking out extending baseboard carrying the front. C, brass fitting with clamping screw for bringing the camera back forward when a shorter focus than that given by the normal positions of back and front is required.

If the focussing movement works too easily it may happen that with long extension the pull of the bellows may draw the back and front together, after focussing, enough to throw the picture out of focus. This ought not to happen, and in the latest forms of camera it is prevented by an arrangement by which when the head of the pinion has been turned sufficiently, on pushing it in it locks the extension at the position in which it happens to be at the time. This is a distinctly good movement.

With hand cameras the methods of focussing are generally the rack and pinion, as with stand cameras; although very often the front is enclosed, so that moving the pinion has externally no visible effect on the camera. When using hand or stand cameras as hand cameras, focussing is generally done by racking the front in or out according to a scale on the baseboard, but the principle is the same as when the focussing is done on the ground glass.

If a camera fitted with rack and pinion is to be kept in working order proper care must be taken of it. The shutting up or opening out should be done gently, by means of the pinion, and not merely by pushing or pulling the camera itself. The racks should be dusted occasionally, and a drop of cycle or machine oil may be put upon the pinion, where it

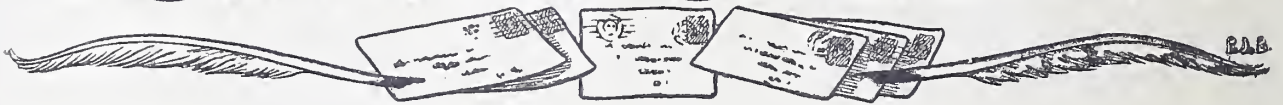
enters the racks. If from any cause the arrangement does not seem to work properly, the cause should be sought for and removed; any attempt to force the rack and pinion will only damage the camera; and even if it does not prevent good work from being done with it, will make it less convenient to use, and will certainly impair its selling value.

Attention also should be given to see that the back and front of the camera, as they are racked in or out, are kept parallel with each other. This is generally no trouble as far as the front is concerned, as the arrangement for allowing the baseboard to slide out ensures the front being straight,

but in some cases where the back does not rack, but is merely pushed forward, it is often easy to push one side nearer to the front than the other. This may be done intentionally, and is a movement known as "side swing," and is at times a help in focussing, but it should not be done inadvertently, or it may neutralise all the advantages of a good lens.

There are methods of focussing by the use of extra lenses or magnifiers, or by modifying the lens by screwing part of it in or out, but as these are expressly adopted in order to avoid any movement of the camera itself, they need not concern us at the present moment.

CORRESPONDENCE



The Editor is not responsible for the opinions of his correspondents.

HYPO AND ALUM TONING OF P.O.P.

Sir,—With reference to an article on toning P.O.P. by means of hypo and alum, and the letter of Mr. Love (on page 6, *Photography and Focus*, for May 12th), he does not say anything therein regarding the depth of printing.

I have had several years' experience with this bath, and find that it is better made overnight or twenty-four hours before use, and boiled or distilled water should be employed. Printing should be carried until the shadows are bronzed slightly, toning being continued for rather more than thirty minutes, according to taste. The formula is the same as that given by Mr. Love in the letter referred to.

Trusting you may find room in your valuable paper for this, as many amateur photographers may be glad to hear of it. Yours, etc., HARRY CARRLESS.

FOCAL PLANE WORK.

Sir,—May I be allowed space to call your readers' special attention to the admirable article by Mr. Abrahams in your issue of the 19th inst.? It gives the whole philosophy of high-speed work in a nutshell.

The truth is that ultra-rapid lenses are useless, *as such*, for anything but indoor portraiture and flashlight work, or as positives in telephotography; while the real value of ultra-rapid plates is for similar work, or for exposures in very bad light—certainly not for very high-speed work.

Mr. Abrahams might have added one word more: to avoid the use of anastigmats with more than two enclosed air spaces for outdoor work. For some years past I have been experimenting in India with different makes of anastigmats for work in a glare, and find that there is no comparison between cemented and uncemented lenses in a really bright light. Half a Zeiss "Protar" at $f/12.5$ will give better shadow detail than a three air-space lens at $f/7$ with the same (correct) exposure in an Indian street with a cloudless sky.

H. G. LE MESURIER, Captain R.E.

MAKING SINGLE TRANSFER PAPER.

Sir,—There have been several notes recently on the subject of making ordinary paper, such as drawing and cart-ridge papers, tinted crayon papers, etc., into single transfer paper for the carbon process, by sizing. The general method seems to be to mix a warm gelatine solution with a warm chrome alum solution, and to apply this mixture to the paper.

Those who try this will no doubt encounter the difficulty of the chrome alum precipitating the gelatine as a stringy mess, which renders the solution useless. A method which avoids this trouble completely is to immerse the sheets of paper singly into a warm solution made by soaking half an ounce of ordinary gelatine in cold water until soft, and then dissolving it in a pint of hot water. The liquid should be used while warm, and the sheets when quite limp are merely pinned up to dry. When dry they are immersed for a few minutes in fifty grains of chrome alum dissolved in five

ounces of water, rinsed in plain water for a moment, and again dried.

A great many sheets can be done at a time very quickly, and the process is no trouble at all. The paper keeps quite indefinitely, and by using this method any paper the photographer happens to fancy can be made the basis of his carbon prints.

With hearty congratulations on the combination of *Photography and Focus*, which we must all wish will long flourish to help us in our work. Yours, etc.,

MALCOLM T. CRAWFURD.

USING SPOILT FILM.

Sir,—Spoilt film may be used to make most excellent labels. The films are first soaked in a warm solution of washing soda to remove the gelatine, and are then dried. The names required are then written on the film *backwards* in plain block letters, using black paint. After allowing this paint to get quite dry, the film is painted all over with white paint, which in its turn is allowed to dry, and the labels are finished.

They are trimmed to the size and shape required, and attached by means of hot glue, supporting the label with string until the glue is dry.

This gives a celluloid label with the characters written on the back. Black letters and a white background are easiest to see in the dark room. Yours, etc.,

C. KEMSEY-BOURNE.

The Beginners' Competition.

Awards for April.

THE combination of *Photography* with "Focus" at the end of April led to simultaneous closing of a number of competitions, and there has consequently been a little unavoidable delay in getting out the award list of some. That delay, however, is now over, and we hope that next month we shall be able to deal with all with our customary promptitude.

In the Beginners' Competition for April the numbers were well up to the average, but, unlike the advanced competition for the same month, they did not show any marked increase.

The first prize, a signed copy of "The Complete Photographer," was won by Mr. E. E. Measures, of 23, Cobden Road, St. John's, Sevenoaks, Kent, for a print, which he entitled "Gently flowing through the Woodlands."

The second prize, a free subscription to *Photography* for twelve months, was taken by Mr. W. Mackrell, of St. Augustine's, Ramsgate, for "A Portrait."

Certificates also have been won by Mr. S. E. Shippard, of 106, Torridon Road, Catford, S.E., for "Pat-a-Cake"; and by Mr. Bert Stafford, of 25, Lime Street, Levenshulme, Manchester, for "Winter Sunshine."

Important for Holiday Making Photographers.

The "Photography and Focus" Scheme for the Interchange of Information.

An open letter to every reader to which a reply is invited.

Dear reader or readeress, as the case may be,

You live in a district which perchance you think is one whither no amateur photographer would think of going to take photographs; or on the contrary you may be so fortunate as to live where all would gladly spend a holiday with the camera. In either case, I want you to spare me a few minutes of your time

I want you to send me a letter, such a letter as you would send to a friend who wrote and told you he was coming to spend a few days in your neighbourhood, and would like to know what there is there to photograph, where to go for the purpose, if permission is necessary in any case, whether he could buy plates, etc., and have the use of a dark room anywhere near. In other words, just the sort of information you yourself would like to have if you were going to take your camera to some place you had never visited before. You know all about your own district; I want to put your information into the possession of any other reader of *Photography and Focus* who can use it.

The whole of the letters I receive will be filed, and a list of the places with which they deal will be published in the paper. Hereafter any reader who wishes to have the information about any of these places can get a copy of it by merely sending a stamped envelope to this office.

No payment will be made for the letters, and no charge will be made for supplying copies of them to those who ask. The plan is a mutual exchange of holiday information. There is no need to limit one's self to one's own district; information about any from anyone who knows will be welcome.

Yours ("as you shall demean yourself," as Queen Elizabeth once wrote),

THE EDITOR.

P.S.—Replies should be addressed The Editor of *Photography and Focus*, 20, Tudor Street, London, E.C.

HOLIDAY INFORMATION.

HORSHAM.

W. W. Aldridge asks for information about photography in Horsham and the district.

Horsham, situated in the most picturesque part of West Sussex, forms an ideal hunting ground for workers in every branch of photography. Those whose delight is in forest or woodland scenery will find all they desire in St. Leonard's Forest, a tract some seven miles long and four wide, part of which lies within about a mile of the town. Some of the by-ways are now closed to the public, but along the main tracks beautiful views can be obtained. Silver birches, larches, pines, beeches, oaks, and rhododendrons grow in rich profusion, forming splendid subjects for the camera. The whole is interspersed with dells and glades in which rising streamlets flow, and here and there pretty old-fashioned cottages are to be found. This by no means exhausts the forest's charms.

The parish church of St. Mary will afford good studies to architectural photographers. Parts of it belong to the late Norman period, the present edifice was erected in 1247. The ruins of several old mansions are to be found in the district. Field Place, the birth-

place of the poet Shelley, is also here; the small room in which he was born is still shown.

The visit would not be complete without visiting Leonardslee, a mansion three and a half miles distant, standing in grounds stocked with foreign animals, including kangaroos, gazelles, and antelopes. The beautiful gardens are planted with azaleas, rhododendrons, bamboos, palms, lilies, and other tropical plants.

Horsham is easily accessible from all parts, lying midway between London and Portsmouth, the journey from London occupying a little over an hour. Those who cycle should make their way through Epsom, Leatherhead, and Dorking. The distance is 36½ miles. All brands of plates and other photographic goods can be purchased in the town, and there is a dark room obtainable free. Lodgings can be obtained from 16s.—H. DINNAGE.

BLACKPOOL.

Particulars of photographic possibilities of Blackpool are requested by "J.P."

Blackpool stands on the westerly brink of Lancashire, between the estuaries of the Ribble and the Wire, with its broad front exposed to the Irish Sea. The town itself is practically a permanent pleasure exhibition by the sea. In addition to its three piers, the promenade,

the "Lands," the Eiffel Tower, and the Great Wheel, there are pleasure palaces, entertainment halls, and a large fair ground at the southerly end of the town. The promenade extends over three miles, and from it glimpses can be obtained of the Manx mountains, and of the Black Combe in Cumberland, which is seen rising in the North, while inland lies the Fylde country.

There is a fine fleet of pleasure steamers which make daily excursions during the season to North Wales, Liverpool, Southport, Fleetwood, Morecambe, Barrow (for the lakes), and the Isle of Man. The longest of these trips does not exceed three hours.

Blackpool does not possess any historical interest. Fine views may be obtained in the fair grounds and on the promenade, bathing, walking, and child studies on the sands, fine wave effects on the front during rough weather, and fine cloud effects and sunsets, particularly in the months of March and April. At Fleetwood, which lies nine miles to the north of Blackpool, excellent marine subjects are to be found at the docks. At a place called Pilling, a few miles from Fleetwood, are the great Lancashire gulleries, where thousands of seagulls are at present breeding.

A two hours sea trip to Barrow-in-Furness brings one to the famous old ruins of Furness Abbey.—ERNEST FLETCHER.

A CRITICAL CAUSERIE.

By "The Bandit"

Concerning some Photographs by Beginners.

"Critics!—appalled I venture on the name,
Those cut-throat bandits in the path of fame."—BURNS.

THE photographing of domestic animals really comes under the heading of Portraiture. General animal photography is quite a different branch of our hobby. In general animal photography we photograph the animals as animals; in domestic animal photography we photograph them as friends. I may go out with my hand camera to snap sheep, or, like Professor Schillings, to take giraffes in their jungle by flashlight, or, like the Bros. Kearton, to register the antics of the festive guillemot holding parliament on its cliffs—and I am doing camera work quite different from the man who sets out to expose a plate on his pet dog or cat. Any sheep, any giraffe, any guillemot, will do. My snap is not of a particular unit, but of a sample of a tribe. Contrariwise, when I take a dog or cat, it won't do to trot out just any dog or just any cat. I must have my own Fido or my own Thomas. It is not "a" dog or "a" cat that I want, but "the" dog and "the" cat. We recognise individual domestic animals, and we don't recognise individual wild or semi-domestic ones; that is the long and the short of it. Amongst a pack of canines I could pick out my Fido, and amongst a whole roof-convention of felines I readily spot Thomas. But in a flock of sheep I don't know one from t'other, and I imagine I should be as vague amongst

giraffes and suchlike wildfowl. That is to say, in photographing Fido I want to show his individuality, while in photographing mere "sheep," or what not, I want to show their general character as a species, or their general beauty. With this aim I take my sheep in a field, or my giraffe in a jungle—the surroundings are part of the photograph, as a record of the animal, for they show where and how it lives. With domestic animals the surroundings may be admirable, but they are not necessary, nor always desirable. For this is portraiture; and in portraiture the background is not an essential portion of the picture.

Here are two reproductions of Beginners' prints which illustrate this point "Fritz" and "Tom's Young Son" (reproduced on p. 48). Note that both are portraits of definite cats, not of any chance-met cat that happened along. Two is better than One, because in Two the surroundings are subordinated, and it may further be surmised that the surroundings are typical of the habits and nature of the creature. "Tom's Young



Fritz.

Son" is shown us in what is probably one of his natural haunts, and in an unaffected enough attitude, to boot (in spite of the "I'm cornered at last!" air). But poor angelic Fritz has been "arranged" and told to look pretty till he seems as much like a stuffed owl as a lovely and lively and lovable cat. A chair has been brought out to the front door, where there is a good light—but where chairs are never put in practice—and a cushion has been placed on it in case Fritz should like to lean his back against it, and somebody has induced him to don his best expression—and behold, the final result is an excellent photograph of a cushioned seat, but a horribly uninteresting pussy, with no character worth mentioning, and none but negative virtues. I'd give a dozen Fritzes for one Tom's Young Son.

Let us glance next at two horse pictures, which I reproduce to show that surroundings, both artificial and natural, can be valuable when properly introduced. "Portrait of a Horse" is a true portrait, "at home," and the stable door helps, precisely as the desk helps when one makes a portrait of a



Homeward,

business man in his office. "Homeward" is a group of types. Probably the individuals which go to form the group are unknown to the photographer, but you may be sure that their friend the ploughboy or farmer would recognise them at once. They are dignified, with the dignity of labour. Had they been groomed and got ready for the camera, and stood in a row, they would have been as bad portraits of this type of horse as "Fritz" is of the common cat. Admittedly, "Homeward" has faults. It lacks a sky; and that blatant tree is doubtful; but it will not bear cutting off. "Homeward" is a nice piece of work in spite of all this.

In "Mischief" we have the picture postcard kitten, a recently created species which I admire not at all. It is like the performing elephant at the circus—a poor specimen of its owners' sense of humour. The elephant is far more remarkable (and, to be frank, far funnier) behaving normally than ringing bells or standing on tubs; and this kitten would be infinitely prettier running after its tail than posing in a flower pot. Indeed, this is a photo-

mental flower-pot he should not have distracted our attention by introducing into his print the alien interest of the kitten. And *vice versa*.

Now look once more carefully at all



Portrait of a Horse.

C. A. Gooch

the five pictures to which I have referred in this causerie. I think that most of my readers will agree with me that "Fritz" and "Mischief" are the two worst and most banal of the lot. Why is this? What differentiates them from the other three?

Technique? Not at all. They're all much of a muchness; indeed, it is only just to their producers to say that their technical level is quite high.

No. The reason they are bad is because the photographer has decided beforehand what he wanted his sitter to look like. That isn't portraiture, it is more nearly a branch of Still-life work.

The other three photographs are all portraiture (even "Homeward" is portraiture to a large extent) because the animals have been taken as they really are. They're not a bit "funny," like "Mischief," nor are

they an atom owlish and angelic, like "Fritz," but they are alive, and they are recognisable and characteristic—characteristic of themselves, not of the photographer. *Voilà tout*.

DISSOLVING SOLIDS ALWAYS SINK, so that if crystals are to be dissolved quickly they should not be left in a heap at the bottom of the bottle, but suspended in a muslin or canvas bag dipping just below the top of the liquid. As they dissolve fresh water then rises to carry on the operation.

A DARK ROOM CONVENIENCE.

ONE of the handiest things in an amateur photographer's darkroom is a shallow cardboard box, large enough to hold the biggest dish in which any developing is done, and of such depth as to be just deeper than the dish. A second box, a trifle deeper, and a loose fit over the first, forms a cover for it.

Both boxes may be strongly made of cardboard and brown paper, fastened with glue; but will last much longer if, instead of brown paper, calico or lining is used, the fabric being well glued and neatly applied all over the boxes and folded down. When quite dry, the lid may, if preferred, be provided with a wooden handle in its centre, and then both should have two good coats of Brunswick black.

Such a box enables the photographer to cover the dish in which he is developing, so that he may have perfect confidence that it is enclosed in a light-tight manner, and the door or window may be opened, or a match may be struck to light a pipe.

PRINT STICKING TO A NEGATIVE.

IT will sometimes happen, no matter how careful one may be, that a drop of rain may get between an unvarnished negative and a piece of P.O.P., and stick them together. If this is discovered in time, permanent injury of the negative may be prevented in the following manner.

As soon as such a thing is noticed, as much of the print as possible should be torn away, and the negative with the rest adhering to it should be put for half an hour in a clean hypo bath. At the end of that time gentle rubbing with the tip of the finger will be found to remove the rest of the paper.

The negative must then be examined for discolouration where the paper stuck. If none is visible, it may be put back into the hypo for two or three minutes, washed in the usual way, and dried, and will be found uninjured. If there are any markings on it, however, it should be put into a combined toning and fixing bath, such as is used for P.O.P. prints, and left therein for as long as is needed to remove the stains, and for as long again; after which it is washed and dried as above described.

If the stains are very bad they may not yield to the combined bath; in which case there is nothing for it but to print from the negative as it is, and to spot them out on the prints.



Mischief.

graph of a flower pot with a kitten in it, not a photograph of a kitten in a flower-pot, just as a snap looking up Ludgate Hill would be a picture of St. Paul's with people in front of it, not a picture of people's portraits backed by St. Paul's.

Talk about "accessories!" Why bless my soul, that white flower-pot is an "accessory" with a vengeance. It is the starting point of the whole picture, whereas the kitten itself should have been the starting point. If the author of this wanted a picture of an orna-



REPLIES TO CORRESPONDENTS.



Queries are dealt with in strict rotation in the order received. Only "Urgent Apparatus" queries will be dealt with by post, for which purpose a stamped envelope must be enclosed.

REGULATIONS.—(1) Envelopes must be marked "Query," and the "Enquiry Coupon" found elsewhere must be enclosed. (2) The full name and address in addition to a *nom-de-plume* must be given. (3) Only one question on one subject is allowed in each letter. (4) Prints may be sent for criticism, but a separate coupon must be sent with each print, and a stamped addressed envelope (not loose stamps) for their return.

REPLIES IN BRIEF.

T.W. (Croydon).—We are sorry, but we have no reporter at Looe.

W. TRENCHARD (Leadenhall Street).—We cannot alter it; if we could, we should. We are quite alive to the point of your note, and agree with you entirely.

INNOCENCE (Gravesend).—(1) Certainly. That is the usual method. (2) Yes. Quite satisfactory. (3) We believe so; but have not used it.

EXPERT (March).—Any building or view that can be photographed from a public road may be so photographed without permission; and you are quite at liberty to sell your prints.

H. STUART (Harlesden).—Many thanks for your good wishes. We are sorry we cannot answer your question, but we cannot understand it. Please write again stating fully what you want to know.

W. BARNAN (Hatton Garden).—Thanks for your letter. It was omitted as soon as the nature of the business was discovered. You overlook the fact that we have to go to press nearly a week in advance.

A. W. KAY (Bradford).—There is the Bradford Photographic Society—honorary secretary, W. H. Womersley, 9, Spring Hurst Road, Shipley. No doubt he would be pleased to give you full particulars.

LICHTBILD (Gainsborough).—Much obliged for your letter. It certainly would seem on your showing to be an error. Not knowing anything about it ourselves, we left it exactly as it was in the MS.

N. M. G. HERBERT (Dalkey).—Lantern slides are only eligible in the annual slide competition. We have no weekly competitions, but P.O.P. prints are eligible in the monthly ones, conditions of which are printed this week.

INTERIOR (Baldock).—The cause is under-exposure followed by over-development. Had it received two or three times as long, with a shorter development, you would have had no trouble. We prefer to use a strong quick acting developer for work of this kind.

FABRIC (Plymouth).—"The Photographic Reference Book," price 1s. 6d., or post free from our publishers 1s. 8d., has about two pages on the subject, and we have an article in type on the same topic, which we hope to print very shortly. It would be too long to give here.

FIDELITER (Carshalton).—The practice of keeping a toning bath is one we cannot recommend. Sulphocyanide should be kept in a ten per cent. solution and gold in a strength of one grain to one dram. The quantity required for the amount of prints should be mixed as required, and thrown away after use.

A. L. CADMAN (Clapham Park).—Nothing can be done by varying the formula, but it is probably not necessary. It is only when amidol is nearly black that it is useless. It is much more likely that the sulphite solution is wrong. This must be fresh. Many thanks for your congratulations and suggestion, which shall have attention.

ANTINOUS (Wylde Green).—If you know a local brass worker or tinsmith, you would do well to get him to make a set of stops for you; you could give him card patterns. To send the lens to an optician for the purpose would probably cost as much as it is worth. If it is by some recognised maker, however, he would no doubt quote you for a set.

PRESSIMIST (Gee Cross).—Both "Focus," May 6th, and *Photography*, May 5th, completed volumes, and title pages and indexes can be obtained for those volumes. The first volume of the combined paper began with the issue of May 12th, and will terminate at the end of 1908. So there will be no need to mix them up, and there will, as heretofore, only be two volumes of either during 1908.

J. C. CARTER (Shanghai).—Many thanks for your letter. We have to trust to the honesty of the competitors to some extent or other in every competition. We recognise what we sacrifice by the limitation, but we also recognise what we gain, which you appear to have overlooked. We gain the feeling in our readers' minds that the competition is ensured against being "scooped" by the entries of a few regular prize winners. We cater for the many, not for the few.

DIGBY LEGARD (Brompton).—We have had no experience of the oxygen-acetylene light ourselves, and we are informed that it is not very suitable for lantern work on account of the heat of the flame fusing the lime. Either a plain acetylene burner, or else oxygen and hydrogen in cylinders would be the better course, we think. E. E. Beard, 10, Trafalgar Road, Old Kent Road, London, S.E., is an expert in such matters, and you would do well to get into communication with him.

S. C. MORTER (Norwich).—Binding cases for "Focus" are not now supplied.

ALEXIS (Belfast).—We used it with plates and found it perfectly satisfactory.

SPARHAM CAMP (Salhouse).—We have sent your letter on to E. M. Richford, 44, Snow Hill, E.C.

HOLIDAY (Lambeth).—Many thanks for your kind congratulations. We have sent your letter on to our reporter.

METOL. Sorry to say that so far we have not got Liverpool on the list. Perhaps what we are saying this week will bring what you want. Write us again.

KING AND COUNTRY (Urmston).—Thanks. We have sent it on. You will probably agree, however, that judging by the examples reproduced, they are almost overpaying.

E. J. SARMEN (Hampton Hill).—88 and 89, High Holborn, E.C. The slightest reference to the advertisements of the issue would have saved you the trouble of writing.

H. N. MANN (New Cross).—Report on Folkestone will be sent you on receipt of stamped envelope. State in your note with the envelope what it is being sent for.

F. MEARS (Liverpool).—Mr. R. Parry, of Bettws-y-Coed, has a dark room for amateurs, and we believe two or three of the hotels also provide one. Many thanks for your congratulations.

A. E. W. CHANTER (Cleckheaton).—Not only is the alteration "temporary," but it is probably limited to your single case. So far as we are aware no alteration whatever has been made.

AMBITIOUS (Highbury).—We do not know to what "regulations" you refer. We have photographed with hand and stand cameras in Belgium, both town and country, without meeting with any interference. Is this a reply to your enquiry?

A. G. YOUNG (Clapton).—Permission to photograph in the Royal parks is obtained on application to H.M. Office of Works, Westminster, S.W., and for the parks and open spaces under control of the L.C.C. to the County Council, Spring Gardens, S.W.

A.H.H. (Wolverhampton).—Mr. Mummery uses the following formula:

Gum arabic solution (33 per cent.)	...	...	1 ounce
Potassium bichromate solution (10 per cent.)	...	...	1 ounce
Ivory black in powder	...	...	54 grains

T. W. SMITH (Newton Abbot).—It can be done, but is hardly an amateur's process. Morgan and Kidd, of Kew Foot Road, Richmond, Surrey, undertake it, we believe. The process is fully described in "Photographic Enamels," price 2s. 6d., or post free from our publishers 2s. 8d. The coupon was on page xli.

PREMO (Bishop's Stortford).—The dye stained our hands at the time, but by washing them from time to time during work we quite prevented the stain from making itself at all permanent.

H. T. KNOX (Bilton).—Dammar varnish that has run down the glass side can be easily removed by wiping it with cotton wool moistened with benzine.

C. WINTERMANN (Holmfirth).—The width of slit of the focal plane shutter does not affect the ratio, but the length of the slit in the behind lens shutter, assuming it is a roller blind pattern, does. A rough and ready rule, which is all that can be formulated, is with the focal plane to halve the exposure. At least the difference would not be likely to be more than this.

BRIDGE (Grimsby).—If you can buy an ordinary eyeglass having slight magnifying power, say one with a focus of two feet, you can easily make a little fitting of black paper which will hold it on your present lens, in front and as close to the lens as possible. This will enable you to do what you want, but you will have to make a fresh focussing scale, by trial, for use with the magnifier.

BANDSMAN (Colchester).—You can enlarge anything up to the size of the plate your camera will take by putting the camera near enough to it, focussing, and rephotographing. If the camera will not open out sufficiently to give as large a picture as you want, an ordinary (weak) magnifying glass may be fixed on in front of the lens. This will shorten its focus and so enable a bigger degree of enlargement to be obtained with the same extension. Write again if this is not clear.

J. HANAU (Catford).—(1) This process is patented, and it would be well to go direct to the patentees for information. Address Messrs. H. Edmund and Co., of Esra Street, Columbia Road, London, E. (2) Gum arabic (fifty per cent. solution) $\frac{1}{2}$ oz., fish glue $\frac{1}{2}$ oz., water $\frac{1}{2}$ oz. To these add ivory black 50 grains, and well grind in. The mixture is thinned with more gum solution if preferred, and strained before use. We have no experience of this or any other formula for the particular purpose named. Many thanks for your good wishes.



THE LATEST IN APPARATUS & MATERIAL.

An Extremely Fast Wellington Plate—The "Xtra Speedy."

WE have been familiar with the products of the Wellington factory from the very first, and have long since learnt to rely absolutely upon their high quality and their uniformity. When it was announced, therefore, that Messrs. Wellington and Ward had put upon the market a new plate—the "Xtra Speedy"—far faster than anything they had hitherto made, and suitable for the very highest of high-speed work, it would have been a simple matter to have penned a panegyric on the plates on *a priori* grounds, taking their excellences on trust, and so printing our review as promptly as some of the others we have recently read. Instead of doing this, we preferred to wait until we had submitted the plates not only to a very searching dark room test, but also to the practical examination of use for focal plane work in the field. This we have now done, so that we are in a position to write of the plates from actual experience, and what our review has necessarily lost in promptitude it will gain in reliability.

There has always been a "quality" about the Wellington plates which has appealed to us particularly. They are fast, but so are others. They are clean working, uniformly coated, and yield good gradation, but without these characteristics no modern plates have the ghost of a chance of popularity to-day. But over and above these they possessed a character of their own, which we felt inclined to attribute to the fact that Mr. Wellington, who has charge of the scientific side of their manufacture, was at the outset a picture maker, as, indeed, he is now when the cares of a great business allow him

to be, and the plates he makes have got to be not merely good all-round plates, but they must also satisfy his own highly critical requirements. The result is a plate which in richness of gradation is simply unsurpassed, while it has all the other qualities which the photographer expects to find in the plate of his choice.

This particular character has always seemed more easily obtainable in a slow plate than in a fast one, a fact for which there are good scientific reasons into which we need not go. Yet the more rapid the plate the more important becomes the need for this quality, since the fastest plates are those which are employed under the most severe conditions—poor light, very short exposure, etc. Accordingly, in testing the new "Xtra Speedy" plate of Messrs. Wellington and Ward, we gave particular attention to the character of the gradation which it yielded.

We are bound to say that it exceeded in this respect our most sanguine anticipations. The plate was altogether exceptional in its rapidity. We have certainly never come across a faster plate on the market. And that rapidity has not been obtained by the sacrifice of any other quality which a good plate should possess. Cleanliness, richness of coating, ease of development, it had in abundance. It is a plate which has been made for studio work, for focal plane work, and for all hand camera or other uses, where the very highest rapidity is required, as is shown by the fact that its H. and D. speed is 350. We are sure those of our readers who try it will not be disappointed.

Hypono: A New Hypo Eliminator.

THE best hypo-eliminator, we have long been convinced, is plain water. There are, however, plenty of workers to whom some preparation for destroying and getting rid of hypo will appeal, and there are circumstances under which a chemical "hypo-eliminator" becomes very useful. In such cases we commend to the notice of our readers the latest introduction for the purpose, "Hypono," for which Messrs. Marion and Co., Ltd., of Soho Square, London, W., are the sole agents.

Hypono is a clear, water white liquid with a faint but pleasant odour. It is described as non-inflammable, non-poisonous, and containing no acids. One ounce of this concentrated solution is added to two quarts of water for use. The plates or prints after fixation are placed in this bath for two minutes; they are then washed in the ordinary way for two minutes, and are free from hypo.

Our own test of this eliminator was made by fixing a plate in a plain hypo solution of four ounces to the pint, rinsing it momentarily under the tap, and then treating it to two minutes in hypono, followed by two minutes washing under the tap. At the end of that time it was assumed

to be free from hypo, and to test this point it was put into a dish of distilled water in which it was left for a quarter of an hour. The water was then tested for the presence of hypo by the permanganate test, but the pink colouration remained unaltered, showing that the distilled water had not been able to extract any traces of hypo from the plate that had been treated with hypono. A second plate was put through the same series of operations, but with plain water instead of hypono, and in this case, as was to be expected, hypo manifested itself in the distilled water.

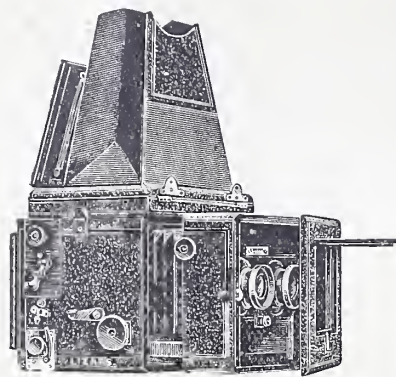
It is also claimed for hypono that it should not only be used for this purpose, but after washing the hands after using chemicals they should be rinsed in a weak bath of it (half an ounce of hypono to two quarts of water), to counteract the ill effects of chemicals on the skin. It is recommended also as an antiseptic in the case of cut hands, etc.

It will be seen from this that hypono promises to be an all-round useful reagent in the darkroom. It has the additional advantage of being cheap, the shilling bottle holding enough for several thousand 12 by 10 plates or prints. Our tests show that the makers' claims are fully justified.

A Reflex Camera for Stereoscopic Pictures.

AMONGST the new cameras of the reflector type that have been introduced this season is one by Messrs. Lizars, of 101 and 107, Buchanan Street, Glasgow, etc., designed to take a pair of stereoscopic pictures, or, at will, a single picture of postcard or "panel" size (6½ in. × 3½ in.).

The general appearance of this instrument can be seen from our illustration, which represents the camera with the front opened to show the pair of lenses. The camera is made on



the same general lines as the Challenge de Luxe of the same makers, from which it only differs in one important respect, to wit, that the back does not revolve or reverse—a thing that is manifestly out of the question with a stereoscopic camera. The focusing is effected by means of a diagonally cut rack and pinion, so as to be as smooth as possible, and there is

a rack and pinion motion provided for the rising front. The shutter is the "Challenge" focal plane, operated at will by

the finger direct, or by means of the "Antinous" release. The setting is accomplished very quickly, owing to the "quick-wind" gear, which is certainly a convenience when a number of pictures are wanted in rapid succession. The control of the shutter speed is two-fold, and both the tension of the spring and the width of the slit can be regulated from the outside, both of which can also be read from outside. The width of the slit is arranged before the shutter is set. Once set it is locked at that width until it is deliberately altered.

The novel feature is, of course, the way in which in the reflector pattern the intermediate diaphragm between the two pictures is arranged. It is made of two separate leaves, which, as the mirror rises, travel over each other, so that even when it is fully up the interior of the camera is still divided into two distinct compartments. In the pattern submitted to us the leaves were a fixture, but we were given to understand that, in future, the leaves will be hinged so as to be readily folded, one against the floor of the camera and the other against the mirror, when the apparatus is being used to give a single picture only.

This apparatus is known as Lizars' "Challenge Combination de Luxe Reflex Camera." It is fitted with double dark slides made to take the ordinary stereoscopic size of plate, 6½ × 3½, and also postcard size, 5½ × 3½. With three book-form slides of the best quality, and a pair of f/8 symmetrical lenses, it sells at £18 17s. 6d. With two Aldis Series II. lenses of 6½ in. focus, it sells at £20 12s. 6d., and a number of others are listed.

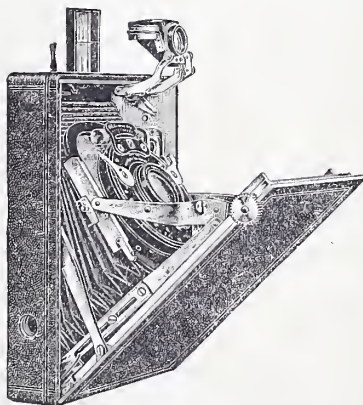
The camera is one which is certain to make a strong appeal to the stereoscopic worker.

The Spring Camera of Chas. Zimmermann and Co.

THE word "spring" applied to the very ingenious little piece of apparatus which we illustrate below does not refer to the season when a young man's fancy turns in a well-known direction, but to the fact that,

when the release is pressed to open the camera, the baseboard falls down and the front springs automatically to the "infinity" stop. As a consequence, the camera, although folding up with sufficient compactness to go into the pocket, is nevertheless ready for instant use when required.

The illustration shows the camera in the act of opening or closing. The closing movement is simply the reverse of the other. The struts which hold the baseboard at right angles to the back are pressed down, and the board is at once free to fold up. There is no need to push the camera front into the back, as is customary. As the baseboard is brought up, the front retreats automatically; the two finders simultaneously withdraw into the seclusion of the interior, and in a moment the camera is ready for the pocket.



The automatic opening and closing is so neat and so complete that at the first sight one has to do it over again for the mere pleasure of seeing the whole thing set in operation so simply.

But when the novelty of this has worn off, and one has eyes for the photographic possibilities of the little apparatus, it is at once evident that in the "Spring" camera we have a thoroughly efficient tool—efficient, that is, in the exacting sense of modern requirements. The camera is made mostly of aluminium, though some of the parts are of wood, is covered with morocco leather, and is very well finished. Three very compact single metal dark slides are sold with each one, and it is also fitted to take the Premo film pack. A focussing screen is provided, in addition to direct vision and brilliant finders, and this screen is fitted with a special form of hood which dispenses with the need for a focussing cloth. A rack and pinion is fitted for focussing, and the extension (eleven inches on the quarter-plate) is more than sufficient for copying same size.

The shutter is a diaphragm one, pneumatically regulated, and giving time, "bulb," and instantaneous exposures. The lenses fitted are Ernemann's Aplanat working at f/6.8 or Ernemann's Anastigmat at f/6.

The price of the camera, film pack adapter, and three slides, but without lens, is £6 17s. 6d.; with the Aplanat it costs £7 17s. 6d., or with the Anastigmat £11 11s. Extra slides are supplied at 7s. 6d. the set of three. The makers of what is a most ingenious, well-constructed, and eminently portable camera are Messrs. Ernemann, of Dresden, whose British representatives are Messrs. Chas. Zimmermann and Co., Ltd., of 9 and 10, St. Mary-at-Hill, London, E.C.

The "Star Light" Portable Electric Lamp.

THE "Star-Light" is a little combined battery and electric lamp, which is being put on the market by Messrs. D. E. Brown and Co., of 10, Basinghall Street, London, E.C. It has already been illustrated in our columns (*Focus*, April 15th, page 361), so we need only point out that it consists of a compact and well arranged bichromate battery, with an arrangement for raising and lowering the zinc. At the top of the battery is an incandescent lamp in a neat adjustable carrier, arranged so that the light can be thrown upwards or downwards, or horizontally as required. One charge, costing 3d., runs the lamp eight consecutive hours (or intermittently for twenty hours or more).

Over the lamp can be fitted a yellow cap, and over this again a red one, for darkroom use. The lamp is charged by emptying into it the bottle of salts, filling it with water up to a mark, and stirring until the salts are dissolved. The cap, with the plunger fully raised, is then screwed on, and it may be left in this condition until it is wanted for use. When a light is required the plunger is pushed down far enough to obtain what light is wanted.

The whole arrangement, which can be obtained from dealers or direct from Messrs. Brown, as above, sells at 7s. complete with one charge and a red and yellow cap. It is certainly a clean, convenient, and portable method of getting a non-actinic or other electric light.

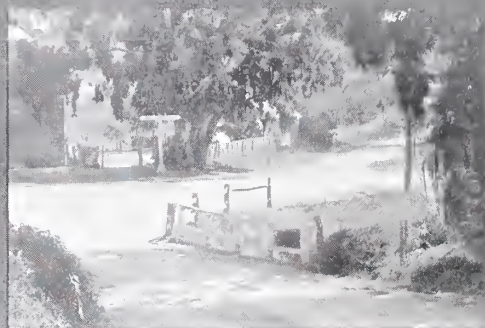
A GROUP OF PICTURES OF THE FAMOUS VICTORIA FALLS.



THE JEALOUS MIST.
THE GORGE OF THE ZAMBESI RIVER.

THE GORGE OF THE ZAMBESI RIVER.
THE VICTORIA FALLS.

SOME OF THE "GREATER BRITAIN" LANDSCAPES.



EVENING ACROSS THE TUNOCK HILLS (NEW ZEALAND). BY J. RENTOUL.
THE CEDAR WOOD (BERMUDA). BY S. H. ANSTEY GRETTE.

TOWARDS PEACE (NATAL). BY E. G. H. FYRRELL.

THE SUGAR LOAF (RIO JANEIRO). BY MISS STATHAM.
WHERE THE ROADS MEET (S. AUSTRALIA). BY A. A. ASH.

"THE STRENGTH OF THE HILLS IS HIS ALSO" (NATAL). BY WALTER F. HOLWAY
WINTER (LAKE ONTARIO, CANADA). BY C. W. DARRELL.

Imperial Orthochrome Plates

ARE MADE IN 3 SPEEDS

- (i.) Special Rapid
H. & D. 200.
- (ii.) Special Sensitive
H. & D. 275.
- (iii.) Non Filter
H. & D. 175.

Unequalled for Spring Landscapes.

Imperial P.O.P.

MADE IN 3 TINTS

- (i.) Mauve.
- (ii.) White.
- (iii.) Pink.

Unrivalled in brilliancy, in wealth of detail,
and delicacy of tones.

The Imperial Handbook for 1908 is now ready It gives particulars of Imperial Manufactures, and is full of photographic information useful to the Amateur.
Ask your Dealer for a Copy.

THE IMPERIAL DRY PLATE CO., Ltd., Cricklewood, London, N W.

PLEASE MENTION "PHOTOGRAPHY" WHEN CORRESPONDING WITH ADVERTISERS.

BUSINESS NOTICES.

OFFICES.—20, Tudor Street, London, E.C.
Telegrams: "Cyclist, London." Telephone: 5610
and 5611, Holborn.

PUBLISHING DATE.—PHOTOGRAPHY AND
Focus is on sale throughout the United Kingdom
every Tuesday morning.

SUBSCRIPTION.—PHOTOGRAPHY AND Focus
will be forwarded regularly at the following rates:
GREAT BRITAIN. ABROAD.

	s. d.		s. d.
Twelve Months ..	6 6	Twelve Months ..	10 10
Six Months	3 3	Six Months	5 5
Three Months ...	1 1	Three Months ...	2 9
Single Copy	1 1	Single Copy	2 1

REMITTANCES.—Postal Orders, Cheques, etc.,
should be crossed and made payable to Iliffe
and Sons Limited.

ADVERTISEMENTS.—All communications on
advertisement matters should be addressed—
The Advertisement Manager, PHOTOGRAPHY AND
Focus, 20, Tudor Street, London, E.C. All copy
for displayed advertisements for the issue of any
particular week must reach Tudor Street by the
first post on Monday morning in the week previous.

PREPAID ADVERTISEMENTS.

SALE AND EXCHANGE (for Amateurs only).
—1d. per word, minimum 6d.

PROFESSIONAL AND TRADE.—Three words
ad., minimum 1/-

All advertisements to be inserted on these
terms must be accompanied with remittance.
To ensure insertion, letters should be posted in
time to reach the offices, 20, Tudor Street, E.C.,
not later than first post on Wednesday.

BOX NUMBERS.—For the convenience of
advertisers, letters may be addressed to numbers
at the office of the paper. When this is desired,
2d. will be charged for registration, and three
stamped and addressed envelopes must be sent
for forwarding replies. Only the number will
appear in the advertisement. Replies should be
addressed, "No. 000, c/o PHOTOGRAPHY AND
Focus, 20, Tudor Street, London, E.C."

DEPOSIT SYSTEM.—Persons who hesitate to
send money to unknown persons may deal in
perfect safety by availing themselves of our
Deposit System. If the money be deposited with
PHOTOGRAPHY AND Focus both parties are advised
of this receipt, and upon intimation of the arrival
and acceptance of the goods, the money is for-
warded, less a charge of 1/- for registration. The
time allowed for a decision after receipt of the
goods is three days. For all transactions exceeding
£10 in value, a deposit fee of 2s. 6d. is charged.
Cheques and money orders should be made payable
to the Proprietors, Messrs. Iliffe & Sons Limited,
and addressed to them at Coventry.

PUBLISHING NOTICE.—Communications for
the Publishers should be addressed, Iliffe & Sons
Limited, 20, Tudor Street, London, E.C.

EDITORIAL NOTICES.

ADDRESS.—All communications for the Editor
should be addressed: The Editor, PHOTOGRAPHY
AND Focus, 20, Tudor Street, London, E.C.

TO CONTRIBUTORS.—The Editor will be glad
to consider original up-to-date manuscripts on
photographic subjects. All contributions must
be typewritten, or in very legible handwriting,
on one side of the paper only, and should bear
the name and address of the sender. Letters or
communications arising out of matters already
appearing in the paper are not paid for. The
Editor disclaims legal responsibility for the
safety of matter submitted to him, but he will
endeavour to return rejected manuscripts, etc.,
when a stamped addressed envelope is enclosed
for that purpose. No notice whatever can be
paid to communications without the name and
address of the sender, not necessarily for publi-
cation.

PRINTS FOR CRITICISM.—Readers sending
prints for criticism or advice are notified that
in all cases it is understood that by so doing
permission is given for their reproduction, without
fee, in PHOTOGRAPHY AND Focus.

PRINTS FOR REPRODUCTION.—Reproduction
fees are only paid by arrangement beforehand.
The sending of a print, without any condition
stated, will be taken as permission to reproduce
it without fee. The Editor will be glad to consider
for publication, with or without letterpress, photo-
graphs of special interest, on terms to be arranged.

PAYMENTS.—Articles and illustrations are paid
for on acceptance.

INTERVIEWS.—The Editor will be at 20,
Tudor Street, on Tuesdays, between the hours of
2 p.m. and 5 p.m., but can only be seen at other
times by appointment.



THE L. AND P. The London and
Provincial Photographic Association
has found a new home at the Apple
Tree and Mitre, 30, Cursitor Street,
Chancery Lane, W.C., within two
minutes' walk of the Chancery Lane
Tube Station. Mr. Yerbury demon-
strates "Sinop" there on Thursday.

GAMAGE'S PHOTOGRAPHIC DEPART-
MENT at Holborn is to be in charge, in
future, of Mr. Ernest Williams, for-
merly of Spiers and Pond. Mr.
Williams has a technical knowledge of
chemistry and photography, as well as
business ability, and our readers who
make their purchases there can rely
upon sound judgment and advice being
put at their disposal.

THE CORRECT EXPOSURE.

A PAPER on exposure was read by
Mr. E. A. Biermann recently be-
fore the Birmingham Photo-
graphic Society, and is printed in its
journal, whence we quote what follows:

The author said that he advised every
photographer to stick to one make of
plate, and fix the speed for one's self,
to what may be called the normal sub-
ject. As all other subjects out of
doors bear a definite relation to the
normal, they can be easily calculated
and fixed once for all by the following
method, which is adapted to the Wynne
meter.

Suppose we find that our normal sub-
ject is $f/78$, and we call this our unit.
Then, near light foreground requires
half normal, if we set $f/78$ on the
Wynne meter scale at half, opposite 1
we shall find $f/111$, which we will call
our subject number for this subject.
Open landscape one-third, set $f/78$
opposite 3-16ths, opposite 1 we find
 $f/181$, this is our subject number for
open landscape. All other subject
numbers are found the same way, until
we get a table as follows:

Light clouds ...	$f/362$.
Open seascapes ...	$f/256$.
Distant panorama ...	$f/181$.
Open landscapes ...	$f/128$.
Near light foreground ...	$f/111$.
Normal ...	$f/78$.
Extra strong foreground ...	$f/64$.
Dark near objects ...	$f/56$.

This table, when the figures are accu-
rately adjusted to the plate and lens
in use, is correct under all conditions,
and all the photographer has to do is
to test the light falling on the subject,
set the subject number opposite the
test time, then opposite the diaphragm
read off the exposure, or in the case of
shutter exposures opposite the shutter
speed read off the diaphragm.

THE MANCHESTER CORPORATION has
asked the Manchester Amateur Photo-
graphic Society to get together a collec-
tion of photographs for exhibition in
Queen's Park.

"THE PRISM" for April is as dainty
as ever. A copy of it will be sent to
any reader who sends a penny stamp
for postage to A. E. Staley and Co.,
19, Thavies Inn, Holborn Circus,
London, E.C.

THE UNIVERSAL POSTAL Photographic
Club, subscription 1s. per annum,
announces the formation of a new sec-
tion. Particulars can be obtained from
the secretary, H. R. H. Newlyn, of
172, High Street, Ramsgate.

THE TREASURER OF THE R.P.S., Mr.
John Sterry, has had to resign, as he
is leaving England for a year or more
in Australia. Mr. Leslie E. Clift, one
of the soundest business men on the
council, has been appointed honorary
treasurer. The R.P.S. is to be con-
gratulated on its new officer.

BARGAINS IN SECOND HAND CAMERAS.
A price list which gives details of over
400 items, mostly cameras and lenses,
and all at greatly reduced prices, has
reached us from the City Sale and Ex-
change, 54, Lime Street, London,
E.C. Many of these show a very great
reduction from the price of the sam-
e goods new, and the list is certainly one
to send for.

KINEMATOGRAPHS IN COLOUR.

THE results obtained by Mr. Albert
Smith, to which reference has
already been made in *Photography*
and *Focus*, have met with unqualified
praise, and Mr. Smith has very kindly
written us at length on their production.

"By a careful choice of sensitizers
and colour filters," he writes, "I have
reduced the colour records from three
to two. Your sentence, 'by thus avoid-
ing the necessity for the use of a red
light filter,' is certainly open to mis-
construction. I enclose a small piece
of the red taking filter which I always
use, which, I think, you will agree is
of most uncompromising redness. The
other filter lets through blue, green,
and yellow, and is spectroscopically
adjusted for each batch of sensitised
emulsion. The red screen is never
altered. You will thus see that the
exposure difficulty is not reduced by
shirking the red record. On the con-
trary, I obtain in good daylight at least
thirty-two pictures per second through
the red screen. It is possible to use a
little dodging with greens, blues, and
yellows, but to obtain such results as
I have exhibited a red filter of most
pronounced absorption must be brought
into operation."

There can be no doubt about the
redness of Mr. Smith's filter. It looks
as if it would make a "safe light" for
fast plates, provided these were not
isochromatic. Certainly, his reduction
of exposure is very wonderful.

Why you personally should use the "Ensign" Roll Films.

Because Austin Edwards, Ltd., is the only firm in the world absolutely specialising on films, and producing nothing but sensitised films for photographic purposes. All the experience there is on Roll Film making is crystallised in "Ensigns."

Because of their exceptional quality, the "Ensign" Films have an enormous sale, not only here, but in the Colonies, on the Continent, and in America.

Because you can develop "Ensign" Films in any daylight tank, box, or machine without having to prepare them first.

Because "Ensign" Spools fit every Camera designed to take Roll Films.

Because the verdict of those who have used "Ensign" Roll Films is: "We have never used anything quite so good before."



When comparing results with other makes, look at the prints not at the negatives. It is the print that proves the quality. Look at the prints.

The Registered word "Ensign" is on the box, and on the band round the spool, and stamped on the metal end of the core. It stands for quality.

Photographic dealers all over the world sell "Ensign" Roll Films at standard prices.

HOUGHTONS LTD

Wholesale Agents,

88/89, HIGH HOLBORN, W.C.

PLEASE MENTION "PHOTOGRAPHY" WHEN CORRESPONDING WITH ADVERTISERS.

A COMPETITION WITH OVER FIFTY prizes for amateurs' prints on the Birmingham Photographic Co.'s papers or postcards is announced in our advertisement pages this week. Entries close June 30th.

× × × ×

AMATEUR PHOTOGRAPHERS IN LIVERPOOL and the district, within a radius of twenty-five miles, should note the monthly competition which is organised by Messrs. W. L. Parkinson, Ltd. The prize is apparatus, which will be on view each month at Messrs. Parkinson's establishment at 5, Commutation Row, Liverpool. The competition is notable, amongst other things, for the fact that Messrs. Parkinson do not make it a condition that competitors shall buy anything from them.

× × × ×

A SUBSTRATUM. A reader writes, "I wrote to you some weeks ago asking you to suggest something in the way of a substratum to prevent a gelatine emulsion film from stripping or peeling off celluloid. I have found Dr. Vogel's substratum answer perfectly, the results are splendid, not a film attempted to move. Two solutions are required: (I.) Fifty grains of gelatine in half an ounce of acetic acid, warming until solution takes place; and (II.) ten grains of chrome alum in half an ounce of water. Two and a half parts of I., one part of II., and seventy parts of methylated spirit are taken for use, coating quickly, and allowing the liquid to dry."

× × × ×

THE DEVELOPMENT OF AUTOCHROMES. The Gaumont Co. announces that it has opened a new department for this work, which it is making a speciality, and that the closest attention will be given to any work entrusted to its care. Prices, etc., can be obtained on application to the company, at its showrooms, 5 and 6, Sherwood Street, Piccadilly Circus, London, W.

× × × ×

A VERY COMPLETE REVIEW of progress in photographic matters is published every year in French under the title of "Annuaire Général et International de la Photographie." The volume for 1908 has just made its appearance. It sells at six francs, and contains 750 pages of reading matter and 250 illustrations. No other annual contains such a mass of information as this. The publishers are Plon-Nourrit et Cie., 8, Rue Garancière, Paris.

× × × ×

A CRITICISM of the exhibition of the Southend Photographic Society was the feature of its meeting on the 14th inst. The critic was Mr. A. J. Connabeer, the art master of the technical school. He emphasised the importance of seeking tone value, condemned the scattering of the high lights about a picture, and was severe on blank white skies. He recommended holding one's pictures at arm's length and viewing them through half-closed eyes, to lose sight of the details for the time being, and to be able to see the picture as a collection of masses of light and shade.

PORTRAITS BY FURLEY LEWIS. A collection of over fifty portraits by Furley Lewis is now to be seen at the Royal Photographic Society, 66, Russell Square, Bloomsbury. It will remain open until June 9th. Although Furley Lewis's work is quite free from mannerisms, there is a quality and distinction about these portraits which completely identifies them with their producer. They ought to be seen by all who can find the opportunity.

× × × ×

THE AFFILIATION. Mr. Sterry, having resigned the treasurership, Mr. Leslie J. Clift was appointed treasurer *pro tem.*, and the vacancy thus caused on the committee was filled by the appointment of Mr. C. Churchill (Woolwich P.S.) The half-yearly meeting of delegates will be held on Wednesday, June 17th, at 6.30 p.m.

× × × ×

A CADBY EXHIBITION. On the 15th and 16th May, Mr. and Mrs. Cadby held a little exhibition of their photographs, mostly portraits of children, in the Lime Tree Studio, Sevenoaks. The work itself is too well-known to need further eulogy from us, and we learn that it was most attractively set forth, as indeed might be expected. Mr. Cadby has had quite a number of commissions for children's portraits, and the residents in Sevenoaks and the surrounding district are fortunate in having in their midst so gifted and sympathetic an artist.

THE WATKINS SYSTEM OF DEVELOPMENT.

THE new system of time development by means of a special developer and time cards showing its speed of action with all makes of plates was fully described in our issue of a fortnight ago. So far the description in *Photography* and *Focus* has stood alone, nothing else whatever having come out about the process. We now have to record the receipt of the new Watkins Plate Speed List; it bears date May 11th, 1908—one day before the full publication in *Photography* and *Focus*, by the way.

In these cards, in addition to the speed numbers of all makes of plates and films, we get for the first time the letters indicating the time of development with the Watkins standard developer. The letters used are V Q, Q, M Q, M, M S, S, and V S, and the number of minutes development which each denotes with the standard developer at 60° Fahr. (H. and D. development factor = 1) are as follows:

V Q Q M Q M M S S V S

2½ 3 4 5½ 7 9 11½

The developer is not yet quite ready, but we learn that the first batch, it is expected, will be out in about a week. We look forward to a great popularity for this eminently practical and soundly scientific system of development. It removes, at a stroke, one of the greatest bugbears of the beginner, and what is a real difficulty to the advanced worker.

THE CONVENTION HANDBOOK.

THE handbook of the Brussels Convention, which will be held from July 6th to the 11th, under the presidency of Sir E. Cecil Hertslet, is a neat little cloth-covered volume, emblazoned with the flags of Belgium and of the United Kingdom, and containing a mass of information about the places that are to be visited.

The frontispiece is a portrait on Wellington Carbon Bromide of the President, looking, as we know him to be, the soul of geniality and courtesy. There are several pages of half-tones illustrating Brussels, Antwerp, Ville-la-Ville, and Malines. The most conspicuous feature of the book is the attention it gives to the travelling facilities, cheap tickets, hotels, and similar points; and the Preface, which is from the pen of the honorary secretary, Mr. F. A. Bridge, has some extracts from the diary of an old traveller, which are to the point and eminently characteristic. The last extract reads: "The possession of a twenty-five days' ticket, even if it is a first-class one, does not entitle its holder to 'boss the country.'"

Particulars of the Convention, to which the annual subscription is five shillings, can be obtained from Mr. Bridge, at East Lodge, Dalston Lane, London, N.E.

SILVERINE FRAMES.

A METAL frame with an embossed design, finished with a dulled or matt silver surface, is being put on the market by Messrs. Griffin, of Kingsway, London, E.C., and should prove attractive to a good many. Its design, as can be seen from our illustration, is neat and not too ornate,



while its colour enables it to be used, without any want of harmony, with almost any tint of photograph.

The frames are made in four sizes, each with three different shapes of openings, oval, round, and square. For midget prints they sell at 7s. per dozen; for C.D.V. or quarter-plate, 9s.; cabinet or half-plate, 13s.; and Imperial or whole-plate, 26s.

'CRITERION'

PRIZE

COMPETITION.

**OVER FIFTY
CASH PRIZES**

**for the best
prints on
"Criterion"
Paper or
Postcards.**

First Prize,
£2 2s. 0d.

Second Prize,
£1 1s. 0d.

Third Prize,
10s. 6d.

**and
50 other prizes of
2s. 6d. in cash or
'Criterion' Goods
as preferred.**

In this Competition all amateur photographers stand an equal chance, as no picture which has won a prize in any competition must be submitted.

No coupon is required, but all prints must be made on one or more of the "Criterion" celebrated papers or postcards which can be purchased in 6d. packets from any high-class dealer. The brands to be obtained are

"CRITERION" { **P.O.P.**
ESTONA (Self-Toning)
CELERIO (Gas Light)
BROMIDE.

CLOSING DATE JUNE 30th.

♣ ♣ RULES. ♣ ♣

1. Each entry must be on "CRITERION" Paper or Postcards, any size, grade, or surface, mounted or unmounted.
2. Any number may be submitted, but the outside label from a packet must be sent with each set of 6 or less sent in.
3. The cards *must* be purchased from a dealer, whose name must be given. If your dealer does not stock—send us a p.c. with his name and address, stating your requirements, and we will forward to him by return of post.
4. Entries must be sent in on or before 30th June marked "Competition P." to the Birmingham Photographic Company, Ltd., Stechford, Birmingham
5. No entry forms are required.
6. Entries will be returned as soon as possible if stamped and addressed wrapper is enclosed (not loose stamps), but responsibility cannot be accepted if any are accidentally lost or mislaid.
7. The Company's decision must be accepted as final.
8. No picture which has previously won a prize in any competition must be submitted.

The Birmingham PHOTOGRAPHIC COMPANY, LTD., Stechford, near Birmingham.

OUR COMPETITIONS

BEGINNERS' COMPETITION.

Open to all photographers who have never taken an award.

PRIZES.

First Prize.—A signed copy of "The Complete Photographer," a half-guinea work by Mr. Child Bayley, now in its second edition.

Second Prize.—A free subscription to *Photography* for twelve months.

One or more certificates of honourable mention will also be awarded.

RULES.

(1) Each competitor can send as many prints as he likes, but each print must bear on the back the coupon, published each week, the name and address of the sender, the title of the picture, and no other writing whatsoever.

(2) No print will be eligible that is larger than 5½ in. × 3½ in. (postcard size) or 5 in. × 4 in.

(3) No print must be mounted.

(4) No handwork other than simple spotting is permitted on negative or print, nor shading or dodging of any kind. It is distinctly understood that entry in the competition implies a declaration by the competitor that this rule has been complied with; and in case of dispute the editor shall have the right to call for the negative, from which the entry purports to be a simple direct contact print.

(5) No prints will be returned, and no correspondence with regard to the competition can be undertaken.

(6) The publishers of *Photography* and *Focus* shall have the right to reproduce, without payment, any of the prints sent in, winning or otherwise. But except the winning prints, the names of competitors of other prints that may be reproduced will not be published without the competitor's consent.

(7) All entries must be addressed "Beginners' Competition," the Editor of *Photography* and *Focus*, 20, Tudor Street, London, E.C., and must be delivered at that address by the first post on the closing date at the very latest.

CLOSING DATE.—Saturday, May 30th.

TITLE COMPETITION.

The results of the competition which closed on May 25th will be published next week.

ADVANCED WORKERS' PRINT COMPETITION.

PRIZES.

First.—"Photography" Silver Plaque.

Second.—"Photography" Bronze Plaque.

Third.—"Photography" Bronze Medal.

One or more certificates of honourable mention will also be awarded.

RULES.

(1) All photographs must be sent addressed "Advanced Competition," the Editor of *Photography* and *Focus*, 20, Tudor Street, London, E.C., postage paid, to reach there not later than the first post on the closing date, and must contain a stamped addressed envelope or label (not loose stamps) if they are to be returned.

(2) Each photograph must be mounted, but not framed. Prints in slip-in mounts are not eligible. Each must bear on the back the name and address of the sender and the title of the picture. No letters or other communications must be enclosed with the prints. Every print must bear attached to its mount a coupon for the competition of the month which will be found in each issue of the paper.

(3) Each photograph must be the work of the competitor as regards selection and arrangement of the subject, exposure and development of the negative, and printing, development or toning, and mounting of the print.

(4) The prints which are accompanied by stamped envelopes or labels will be criticised by post, and the editor shall have the right to reproduce any of the prints, winning or otherwise. The awards will be made a fortnight after the closing date.

(5) Awards may be increased or withheld at the absolute discretion of the judge, and in all cases of dispute the decision of the editor will be final.

(6) There is no restriction as to the eligibility, except as set forth in these rules, and except that the same negative must not be used more than once in the competition. That is to say, that a print from it once submitted, all further prints, however varied, are ineligible.

(7) Neither editor nor publishers of *Photography* and *Focus* shall be held in any way responsible for the safety of prints, or for their return to the competitors.

(8) The sending of a print to the competition will be regarded as a declaration to the effect that it is eligible under these rules, and that the competitor agrees thereto.

CLOSING DATE.—Saturday, May 30th.

SPECIAL SUBJECT COMPETITIONS.

Open to all photographers.

PRIZES.

First Prize.—"Photography" Plaque in Silver.

Second Prize.—"Photography" Plaque in Bronze.

Third Prize.—"Photography" Medal in Bronze.

One or more certificates will also be awarded.

RULES.

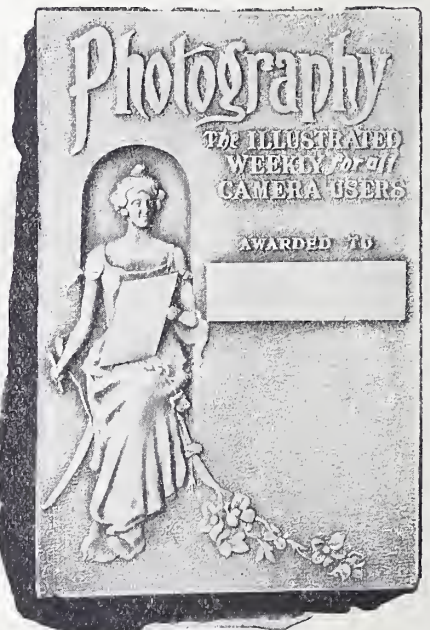
(1) The subject of each photograph entered must be that announced for the particular competition.

(2) Each competitor can send as many prints as he likes, but each print must bear on the back the name and address of the sender, the title of the picture, and no other writing whatsoever. Each print must have attached to it a coupon for the competition of the month, which will be found in each issue of the paper.

(3) No print must be mounted. No handwork other than simple spotting is permitted on negative or print, nor shading or dodging of any kind. It is distinctly understood that entry in the



"Photography" Medal. Actual size.



"Photography" Plaque. Actual size. Weight in silver over three ounces.

competition implies a declaration by the competitor that this rule has been complied with; and in case of dispute the editor shall have the right to call for the original negative, from which the entry purports to be a simple direct contact print.

(4) No prints will be returned, and no correspondence with regard to the competition can be undertaken.

(5) The publishers of *Photography* and *Focus* shall have the right to reproduce, without payment, any of the prints sent in, winning or otherwise. But except the winning prints, the names of the senders of other prints that may be reproduced will not be published without the sender's consent.

(6) All entries must be addressed "Special Subject Competition," the Editor of *Photography* and *Focus*, 20, Tudor Street, London, E.C., and must be delivered at that address by the first post on the closing date at the very latest.

SUBJECTS AND CLOSING DATES.

A Dog, Cat, or Parrot. Closes Saturday, May 30th.
A River Scene. Closes Tuesday, June 30th.



What Photographers Say.



"I should like to add that since trying your plates at the beginning of last year, I have been a regular user of them, and have never handled plates easier to work, or giving such uniformly good results. Their keeping qualities also appear to be excellent."

"I may say that I have used nothing but Gem Salon plates for the last two years, mostly for focal plane work, and have found them all that could be desired for both focal plane and ordinary shutter work; they have a very fine grain and great latitude of exposure; in fact, in my opinion, they are the plate *par excellence* for all kinds of work."

"I may here note I have tried most of the various brands and makes of plates, but none have been so satisfactory in my hands as your Salon."

"I have been using your Salon plates for high-speed work ever since their appearance on the market, and they have always given the greatest satisfaction. Previous to their introduction I had tried nearly all the brands of very fast plates, but could never get one to please me until the arrival of the Salon, which is beyond dispute the fastest plate made."

"I may say that I have used every brand of your plates, and they have given me beautiful crisp negatives. The great feature about them in my hands has been the clean, bright working quality, giving negatives, with ordinary care, remarkably free from fog. I have tried them on almost every class of work—Snap Shots, Portraits, Landscapes, Interiors, etc., and have never found them to fail."

(The originals of the above testimonials may be seen.)

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THE
FOCAL
PLANE
PLATE.

400 H. & D.

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Half-plate - 2/3 doz.

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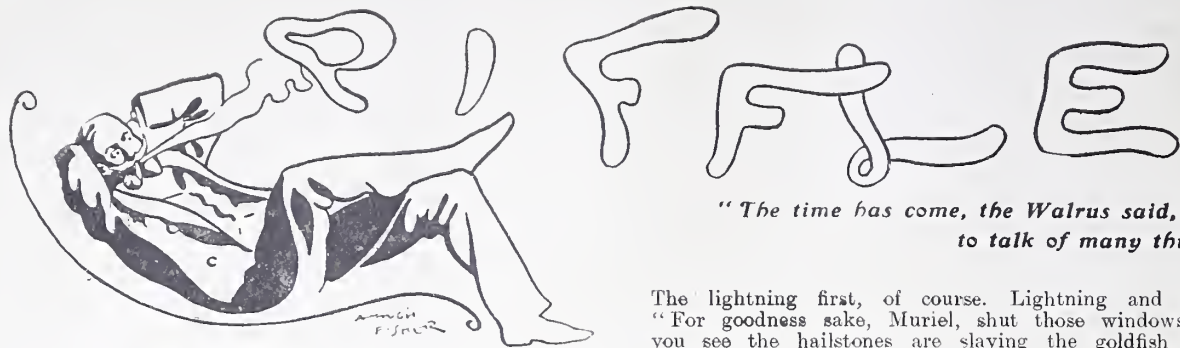
Every packet of Gem Plates has a coupon attached. Twelve of these coupons entitle the sender to 1s. worth of Gem materials—plates, papers, postcards, or a 2in. iso screen. Coupons are available until further notice.

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are manufactured only by

THE GEM DRY PLATE CO. LTD.

at their factory,
CRICKLEWOOD,
LONDON, N.W.



*"The time has come, the Walrus said,
to talk of many things."*

OF all the hackneyed, motheaten, threadbare quotations ever quoted one of the mouldiest is the assertion that "in the Spring the young man's fancy lightly turns to thoughts of love." One can only hope that as the young man grows older he becomes wiser, and allows his thoughts to turn to love all the year round. There is more sense in saying that the advent of Spring turns the young man's fancy to thoughts of photography. Also the old man's. My own, for example. For as I sit writing on this lovely morning in Spring I am beginning to form strong and urgent resolutions as to commencing some real high-class slap-up photographic work. I am well aware that it has been said by more than one ignoramus that I don't (or can't) do any photographic work myself, but only write about it. I'll show them.

* * *

In fact, I have it in my heart to start this very morning as soon as I have finished writing this. There is my trusty camera with six double slides and a changing box all ready loaded; it is a glorious sunny morning with fat chunky clouds waiting to be isochromatised; the trees are putting forth the tender leaves of hope and horsechestnut; the good old ortho daffodil is blowing in the garden. (So is the wind, by jingo. It was quite calm a moment ago.) Within five minutes' walk is abundance of top-grade rural scenery, with just the right sort of lighting. (At least, the light was all right just now; but as I live it is almost too dark to write.)

* * *

But I am not such a raw and callow hand as to suppose that sunshine is essential to good camera work. Give me a mellow light, with nice grey distances. (Great Scott! There are no distances, grey or otherwise. Here is a dense yellow fog, and a chill in the air like essence of iceberg. "Muriel, light the fire." Why in the name of all that's incongruous do parents bestow the name of Muriel on sixteen stone of domestic servant with a forty-inch waist? Surely Muriel should be slender.)

* * *

Perhaps after all I had better run up to London presently and get some fog pictures. No one has yet done justice to fog pictures in London. Perhaps that achievement is reserved for me. A Spring fog is just the right sort, too. I shouldn't wonder if I bag some real masterpieces this morning. Anyhow, I'll try. (What's this? Where's that fog? Absolutely gone, as I'm a sinner. And, yes—no—yes—snowing like fury. A regular blizzard. "Muriel, put some more coal on, and bring up the Yule log we did not require at Christmas." Two inches of snow outside. Three inches. A foot.)

* * *

I have been lying in wait for some nice snow scenes for years. My chance has come. Patience is about to be rewarded. It has been a tiresome job making summer landscapes into snow pictures with photopake and a toothbrush. Now I can just pop out with my camera and get the real article straight away. (Or, rather, I can't. Raining in torrents. Snow all gone.)

* * *

Those meadows down by the river will be splendidly flooded by now, and ought to yield some fireworky subjects with the stormy sky reflected in the water. There is plenty of sun at intervals, too, to make nice light tracks in the turbid flood. Not a pale wintry sunshine, either, but a good old blazing June specimen, and jolly hot, too. ("Muriel, open the windows. This room is like an oven." What the —. Well, I never did! Thunder! and lightning.

The lightning first, of course. Lightning and thunder. "For goodness sake, Muriel, shut those windows. Can't you see the hailstones are slaying the goldfish in the aquarium?")

* * *

It is evident that I do not pay sufficient attention to the almanack. I quite overlooked this eclipse of the sun. Another lost opportunity. If I had only known I could have borrowed a telephoto lens and been ready for this one. ("Light the gas, Muriel.") As it is I can only sit here scribbling like an idiot, when I might have been securing valuable astronomical records, and very likely have got something bad enough for reproduction in the "Daily Mirror." ("Good gracious, Muriel, turn out that gas. You don't suppose I want it alight with the sunshine blazing into the room like this. I'm not a bat. At least, I don't think I am.")

* * *

What a fine effect that clump of trees over the road gives, with the whirling clouds of dust almost obscuring them. Comical, too, to see that hat flying high in the air—a lady's hat, like a tropical bird. Also a gentleman's hat. And an umbrella. They are gone, now. So is the dust. Now the trees are again hidden with more dust clouds. This time the dust seems to come from above, instead of from below. Very strange. Such fine dust, too. Almost like smoke. Exactly like smoke. It is smoke. (Holy Moses, Muriel, the chimney is on fire! Don't scream, you adipose fatuity; get some salt and put the fire out. What in the world do we want with a fire on a broiling day like this?")

* * *

I remember there are to be some Morris dances in the park this afternoon. I might photograph them. I am not very keen on the idea, though; it is rather too Sir Benjamin Stony for my taste. I'll none of it.

* * *

Well, I've finished my scribbling, and there waits my patient camera. Let it wait. I know I had resolved to do great things with it to-day, but that resolution is an hour old. Since its birth things have happened, haven't they, Muriel? Why should I go out? Photography be hanged. Is it not Spring? Am I not young? In the Spring the young man's fancy lightly turns to thoughts of— "Muriel, get my slippers; produce the cigar box and the matches; pass me the third book from the left in the top row ("A Sentimental Journey," by Laurence Sterne), and wheel out my easy chair. And, Muriel, if anyone calls, I'm out. Understand, cut! I've gone out with my camera. Tell them so, good Muriel, though thank Heaven it be not the truth."

THE WALRUS.

SUBSCRIPTIONS.

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PHOTOGRAPHY

A JOURNAL FOR EVERY CAMERA USER.

EDITED BY R. CHILD BAYLEY.

PUBLISHED WEEKLY.

JUNE 2ND, 1908. TUESDAY. No. 1,021. Vol. XXVI.



THE BASHFUL LOVER (SEE PAGE 80).

BY JAMES SHAW.



SPIRIT of the TIMES

Tank Development.

Perhaps the most important of the many articles we are able to put before our readers this week is that of which the first part appears on page 75, and deals with development with the Kodak developing machine and the Kodak tank. Its importance is well indicated by the fact that, as far as we have been able to gather, it is the first article on its subject to appear in any British photographic paper. We suppose the entire absence of any literature except the maker's own instructions must be taken as a high testimony to the simplicity of the apparatus. If so, it is no more than it deserves. The man who develops lengths of roll film in any other way is sacrificing everything that makes for comfort and success, and, as far as we can see, to no advantage whatever.

Not Fool-proof.

No photographic apparatus is absolutely "fool-proof," and there are times when even the expert becomes for the nonce—and strictly in the Pickwickian sense—a fool. By accidental or intentional ignoring of instructions, the result obtained in the tank or machine is not what it should be. Our article, which we believe illustrates every possible defective result that can be got by divergence from the broad and simple path laid down in the instructions, may, then, serve to show him where he is wrong, and point the way to better things in the future.

We may add a word on a point not mentioned by our contributor—the distinction between "machine" and "tank." By "Kodak developing machine" is meant the original apparatus, in which the film is wound on to the apron and developed in the vessel in which the winding is done; by "tank," reference is made to the later type, wherein the apron containing the film is transferred to a metal tank of developer. In the case of the "machine" the handle has to be turned slowly during the whole time of development; in the other pattern of instrument the

tank only has to be reversed now and again. Both have their adherents.

Camera and Lens.

The advice that is so often given to those about to buy a camera, namely, to spend the money on a good lens rather than on an elaborate camera, is sound enough. But a word or two of caution may be given to those about to act upon it. The best lenses demand for their efficient working that the camera shall be rigid, and that the back and front shall be strictly parallel. Now, if such a lens is mounted on a badly-made camera, one of such a character that the tension of the bellows as the front is racked out pulls the front over a little, so that it is no longer quite parallel with the back, almost the whole of the benefits which might reasonably be expected from the high quality of the lens will be lost. Many movements and adjustments in a camera are conveniences and luxuries, no doubt; but strict parallelism when required, and that at any extension, is a necessity if good definition at a large aperture over the whole of the plate is to be secured. Of course, if the lens is much stopped down, the image will be sharpened up, whether the front and back are parallel or not; but then, if it is to be stopped down, there is not much advantage in getting a high-class lens, since aperture is what is paid for.



MEMORANDA *for the week*

To send a postcard to Burroughs, Wellcome & Co., Ltd., Snow Hill, London, E.C., for a free copy of a very dainty little book, "Yesterday and To-day" (see page 74).

Keep the Lens Central.

While writing the previous paragraph we were reminded of several prints which we have seen recently, all with the same fault. They were landscapes, and were taken the horizontal way of the plate, and one side in each case was decidedly darker than the other, especially in the two corners. In one case the photographer called at the office with his print, and we asked him to look carefully at his camera when he got home. We more than suspected that it had a cross front movement to it, and that the lens had been used when it was on one side, and not exactly opposite the centre of the plate. In the other cases we suggested the same thing in correspondence. We have since heard that our surmise turned out to be correct; in each case the lens inadvertently had been right out of the centre, and as a result the corners of the plate that were farthest from it had suffered from a falling off in the illumination.

Photography at Whitsuntide.

This will be the last issue of *Photography and Focus* to be on sale before the Whitsuntide holidays, and an attempt has been made to ensure a holiday character for as much as possible of its contents. The article on the selection of a colour screen will be found more than ordinarily seasonable, as just at the present moment the great problem before the landscape photographer is the rendering of the light green of the new foliage at anything like its true value. There is a reasonable hope also of fine weather for the early summer holiday, and if we are favoured to that extent the problem of "keeping the clouds" may become as much in evidence as the other. In either case the advice on the selection of a screen ought to be helpful.

THE PATCHWORK PICTURE.

We started in a troop, an enthusiastic group;
There was Smith, Brown, Jones, and Robinson, and I;
On photography intent, each one was keenly bent—
On an exhibition picture, by the by.

Now, Jones was great on cows, and as one had stopped
to browse,
He stayed behind to do the best he could;
And as Smith was filled with glee, when he saw a
rugged tree,
We left him on the border of a wood.

Any cottages for Brown, if they're old and tumble-
down,
Have a fascination which he can't resist;
So, as one then came in sight, we left him in delight;
Whilst Robinson went hunting for a "mist."

To see how each had fared, results we all compared.
But none of us had got just what he sought;
My landscape failed to please, so I "printed in"
Smith's trees,
Which made a great improvement, so I thought.

Then it gained in strength a lot when I put in Brown's
old cot,
And yet it didn't satisfy, somehow;
So Rob.'s mist I introduced, and I finally produced
A picture when I'd stuck in Jones's cow.

And then with heart aglow I sent it to a "show,"
Where the judges and the critics termed it "fine";
But I think it owed its fame to the authors' compound
name,
For I signed it "Smibro Jonrobinandmine."

Title Competition.

We are sorry that we have not been able to get out the results of the Title Competition this week, but, having to go to press earlier than usual, we have been unable to arrive at it in time. It will be published next week, together with the picture for a new competition.

Outdoor Portraiture.

The article on the portraiture of pretty faces which we published a fortnight ago has brought us a number of communications from readers whose portrait work is done out of doors. Generally speaking, the prints

which accompanied them showed unmistakably the conditions under which they had been made. The primary defect is the intense top lighting, which is so often present, and against which frequently no precautions are taken. The result is a harsh high light on the hair, very dark shadows round the eyes and under the chin, and a generally heavy and unpleasant effect. When some sort of sky shade has been used, and this has been got over, then the other defect of outdoor portraiture becomes prominent. The lighting is either very flat, all over alike, or else the passage from light to shadow is abrupt. In both cases much of the modelling of the face is lost.

What is that Modelling?

The beginner may not be quite clear as to the nature of what is meant by modelling. Let him note a face in a room and not very far from a window, but not immediately in front of it. The roundest surface of the cheek, he will notice, appears rounded, not merely, or even chiefly, from its drawing and perspective, but from the fact that, being curved, the intensity of the light which it reflects varies in the different parts. An even better example is a white billiard ball. If this is looked at carefully the observer will note that the mere play of light and shade upon it is sufficient to convince him through the eye that it is a sphere, and not a mere flat white disc. It would be possible so to illuminate that billiard ball that each part appeared equally white. In that case we should say that the modelling had been lost. In portraiture, then, by modelling we mean securing such a play of light and shade that the contours of the different surfaces are clearly indicated. This is done to a great extent by a careful control of the lighting. It is not a matter for a cut and dried formula; the photographer has got to study the effects at the time and try to make the best result he can. And it is just in this direction that outdoor portraiture is particularly difficult.

The Open Letter.

The open letter to readers which we printed last week has already brought in a number of replies, although at the moment of writing the paper has not been published twenty-four hours. May we ask those who have not yet written to do so if they can at an early moment, as the holiday season is upon us, and the sooner we have it the sooner it will be available for their fellow readers.

Photographs of Animals.

It has been said that no one is a prophet in his own country. We are the more pleased, therefore, to observe that Mr. Douglas English's animal photographs, which are widely known and appreciated on the Continent, have received recognition from the authorities of the British Museum (Natural History Department) during their author's lifetime. Some half-dozen frames of his pictures form a portion of the permanent exhibition in the gallery devoted to British vertebrates. We noticed that there were vacant panels on the screen; and can only hope that they are reserved for the acquisition of further examples of the type of zoological photography which Mr. English has made so peculiarly his own.



Selecting a Colour Screen.

THE CLAIMS OF THREE, SIX, AND TEN TIMES SCREENS.

WHEN the photographer has decided to employ orthochromatic plates and a colour screen, he is apt to ask himself what particular strength of colour screen is likely to be of most service to him. Is he to have a three times or a six times screen, or is he to go still further and get the ten or even the forty times screen, which is said to give perfect colour rendering?

The answer to such a question is that it is better not to overdo it. Except for the professional copier of pictures, the very deep colour screens are not much required; if, indeed, they are wanted at all. A ten times screen means that exposures are often to be prolonged to such an extent that the photographer, in desperation, leaves the screen off altogether; or if he does use it, he cuts the exposure down and so falsifies his colour rendering at once. A full exposure, it should always be remembered, is an absolute necessity, if the full benefit of orthochromatic plate and light filter is to be secured. With all ordinary exposures multiplied by ten, this is often very difficult. Moreover, if a six times and a ten times filter of the same kind are compared in the camera, it will be found that by giving a full exposure with the six times screen a better colour rendering can be obtained than by giving too short an exposure with the ten times screen; so that,

where the exposures have to be short, as is so often the case, it will be found that the six times screen will have a marked advantage.

The question between three times and six times is not so readily answered, although the need for a full exposure in each case, if the full benefit of the screen is to be secured, is just as great. For strongly-coloured flowers and fruit and similar work, the six times screen is almost a necessity, as the three times one will not reproduce very pronounced reds and yellows with sufficient truth.

Landscape workers, on the other hand, can find nearly everything they want in a good three-times light filter. It will sufficiently lighten the foliage greens for them to look true, and if clouds are in the landscape it will render them with good printing value in the negative. They may want a little shading during printing, but nothing more; they will be there, and in sufficient contrast. Such a screen also does not put instantaneous work out of the question—a consideration in windy weather or for the hand-camera user. Many a landscape subject can be secured with a twenty-fifth of a second at $f/8$ —that is, assuming it is an ordinary open landscape and that a fast plate is in use. This means that with a three times screen we must give approximately an eighth of a second—not by any means an impossible hand-camera exposure.

The conclusion, then, is that for all ordinary work the advantage lies with the three or four times screen, which will give all the correction wanted in landscape and general photography; while the photographer of still life subjects, such as flowers, and of highly-coloured objects generally, will do best to get a six or more times screen.

Certainly, if only one screen is to be bought, it would be wise to get the weakest, as being most often useful.



A Sultry Evening.

By R. Y. Holmes.

The Use of the Swing Back in Portraiture.

THE great majority of photographers if they were asked the use of the swing back would say that it is to correct the vertical lines in architectural and similar subjects, when the camera is tipped. This is the purpose which called the swing back into being no doubt, but inasmuch as we have it on our camera, we can use it in other ways.

In nothing will it be found more advantageous than in portraiture, where we have to get certain parts sharp, with the largest possible aperture of the lens. A seated figure, for example, may have the hands several inches nearer to the camera than the face. A slight swing of the bottom of the back outwards will remedy this, although it must not be overlooked that it will slightly enlarge the hands at the same

time. Other cases need not be given, but the photographer who realises in his portrait work that he has in the swing back an aid to focussing that may often be very serviceable will find that the aperture in the lens may frequently be larger and the exposures in consequence shorter than would otherwise be the case.

Conversely, too, it may be possible by those who stick at nothing to secure the effect they desire, to use the swing back to reduce the size of feet or hands, remembering that the more any part of the plate approaches the lens, the smaller will be the proportions of the image on those parts. But this necessitates stopping the lens down pretty considerably to get face and hands or feet both sharp at the same time, so that it is only possible when exposures can be long



GLADYS.

BY WALTER B. WOODLAND.



Under The Trees.

By Frank M. Sutcliffe. Special to "Photography and Focus."

THERE is no place more delightful than a forest. Those who have been fortunate enough to live for years in the heart of a wood take badly to living elsewhere.

The great charm of forest life is that it is so full of surprises. Even if the forest is of no great size, it

always seems much bigger than it is, for the extent of one's vision is limited. As for pictures, they are so plentiful that it is a case of too much riches; the difficulty is to know where to begin. Somehow or other, when looking for subjects, one always tries to find a view with an opening out of it. Woodland scenes blocked in on every side do not seem to please like those where the eye can follow a path or vista leading to somewhere beyond.

There are many things, besides the trees, in a wood which are full of beauty. Even the soft carpets of leaves and moss have their charm; but the charm is more of colour and feeling than of shape and form. But the weeds growing out of the ground and hanging over the rocks take shapes and grow with a languid, elegant air different from the same weeds out in the open. They are protected from the rough winds and storms of the outer world; and though they may be less hardy, yet one can see and feel that their development has suffered no check.

Take the brambles, for instance, in the illustration here given. Suppose this rock had been on a bare hillside, and that by chance a bramble seed had been dropped above it by a bird. Would that bramble have been as graceful as the one here? Would it have rested so lovingly on the face of the rock? I doubt it.

Those who have not done much photography under trees often go wrong with their exposures.

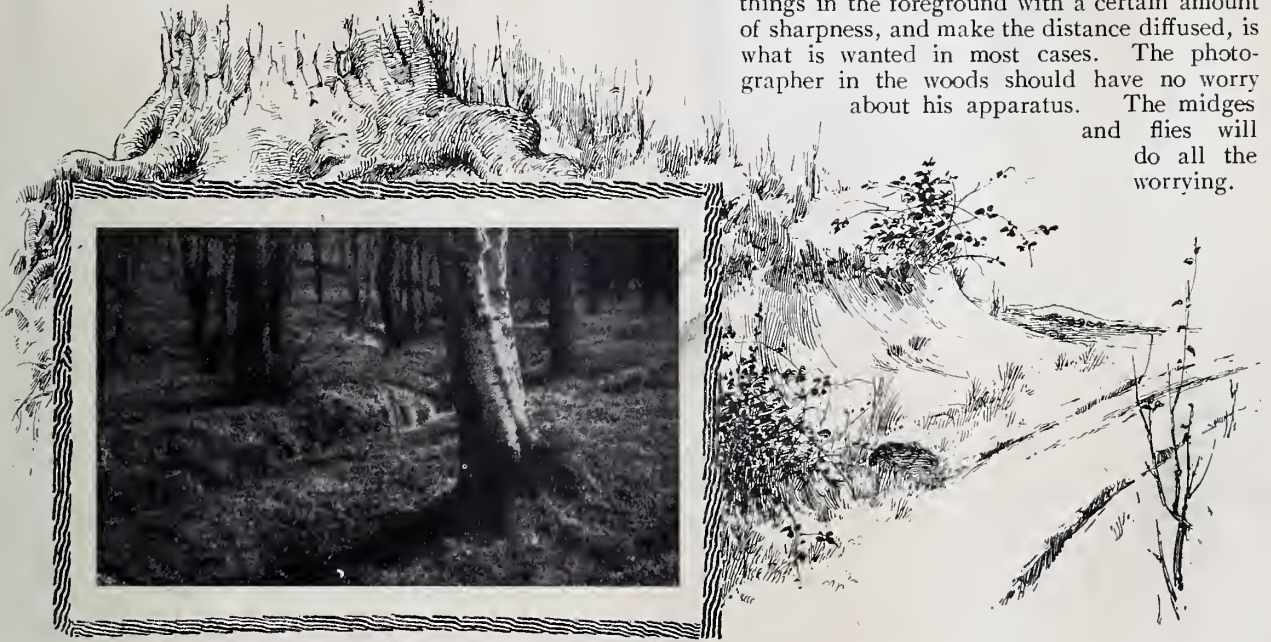
In the days of wet plates, half an hour, or as long as the plates would keep moist, was considered to be the average exposure, and even then the plates were grossly under-exposed. Some of the best woodland scenes on dry plates which I have seen were exposed for from ten to fifteen minutes.



UNDER THE TREES.

When we remember working in a wood is often like working in a dark room lit with green light, we can understand that long exposures must be the rule.

It requires a trained eye to distinguish the colour of the dominant light. I remember once seeing an artist making a painting of the interior of a church the walls of which were whitewashed. In his picture the artist has made these dark green, and dark green they were. They took their colour from the leaves and grass outside.



It is sometimes even difficult to see what is on the screen. A view meter which can be adjusted to suit lenses of different focal lengths is then very useful. A square frame of wire seen through an eyepiece fixed above the focussing screen may be used, the frame being made to slide on a bar marked to suit the lenses the worker carries. It is also advisable to be able to focus a camera by scale; and one of the secrets of successful woodland photography is thoughtful focussing. A lens which will render a few important things in the foreground with a certain amount of sharpness, and make the distance diffused, is what is wanted in most cases. The photographer in the woods should have no worry about his apparatus. The midges

and flies will do all the worrying.

How to Make an Album.

By Will Barnes. Special to "Photography and Focus."

IT is safe to say that hardly two photographers in a hundred use the same method of storing their prints. I am afraid the bulk of us take prints off the pick of our negatives and put them on one side, until a mass of loose photographs on different kinds of paper accumulates and forms a motley collection which is neither pleasing for ourselves nor to our friends to whom we may want to show them.

Again, when they are in this form we give away first one print and then another until only the very worst are left. In direct contrast to this we have those enthusiasts who produce a large number of negatives in a year, but whose efforts are probably centred upon a dozen or even fewer of these from which prints are evolved and framed for exhibition purposes. The majority of us, however, have not the skill or even the patience necessary for photographic work of this latter description, but are content to photograph various little bits that appeal to us, with the idea of keeping a pictorial record that will recall to mind when we see it the original as we actually saw it at the time. Such may be interested in the writer's method of making an album, detailed below.

At a good glass stationer's or photographic dealer's we can get an album with plain thin boards inside. These can be procured in all prices from 1s. upwards, according to the size and quality—particularly the quality of the binding. If the prints vary in size from half-plate downwards, a size about 13 × 11 in. upright shape will be found useful. Some large sheets of "nature" paper in various colours are also

required. These are cut up into sizes about $\frac{1}{2}$ in. smaller than the leaves of the album, and each of the album pages is then carefully covered with the "nature" paper by pasting the edges and rubbing or pressing them well down in position. When finished, we shall have an album with good stiff leaves covered with art or nature papers, upon which we can arrange and paste our prints. The colours, too, can be chosen to suit the particular kind of views or the medium and colour of our prints.

Now for the prints themselves. The most suitable portion of each photograph may be selected by using two L shaped pieces of card, and the prints trimmed to the size thus indicated. They are then ready for mounting direct on to the finished pages of the album; after they have first been loosely laid on the pages and arranged to give effect. The prints look better if the mountant is not spread all over the back of the print, but just round the edges.

Another way of arranging the album, but one which is a little more trouble, is to cut out the openings in the "nature" papers before pasting them in. These openings must be the same size as the selected portion of each photograph they are required to mask. The photographs are left untrimmed, or else about $\frac{1}{4}$ in. larger than is actually required. Then, if each photograph is fastened down to the album leaves by just pasting each corner, so that the particular openings in the "nature" paper mask the prints for which they have been cut out, we shall have an easily made and pleasing album. If titles or other suitable matter be printed on the

"nature" papers in conjunction with the photographs, a still further improvement will be effected. "Chinese white" mixed to a suitable thickness from a tube of this particular "water colour" can be used for the dark coloured papers, and Indian ink for the lighter.

The writer has several albums finished in this manner, and although the prints take more arranging and placing than in the dealer's usual stock albums, the extra time spent is well

Seaside Picture Titles.

- "On the beached margent of the sea."—*Shakespeare*.
 "Glittering sands."—*Coleridge*.
 "The wet beach."—*Lowell*.
 "The resounding shore."—*Milton*.
 "Now the wild white horses play.
 Champ and chafe and toss in spray."—*M. Arnold*.
 "Break, break, break,
 At the foot of thy crags, O Sea."—*Tennyson*.
 "In cradle of the rude imperious surge."—*Shakespeare*.
 "The dreadful summit of the cliff
 That beetles o'er his base into the sea."—*Shakespeare*.
 "They chase the waves and the waves chase them."
 —*A. H. Beesley*.
 "Sands that edge the ocean."—*Bryant*
 "The lonely shore."—*Byron*.
 "Time writes no wrinkle on thine azure brow
 Such as creation's dawn beheld thou rollest now."—*Byron*.
 "The cold sea-fog came whitening down."—*B. Harte*.
 "When fogs are thick on the harbour reef."—*B. Harte*.
 "When the billows are sleeping."—*Moore*.
 "The sharp reef lurks below."—*Whittier*.
 "And the multitudinous
 Billows murmur at our feet
 Where the earth and ocean meet."—*Shelley*.
 "He gathereth the waves of the sea together as an heap."
 —*Psalms*.
 "The troubled sea."—*Isaiah*.



THE best test of one's knowledge of a place is to read a book about it by one who loves it, and see how much of the contents is fresh. Judged by this standard, I found that my acquaintance with London City was indeed slight. I

thought I knew a little about the Strand and the Temple, Staple and Clement's Inns, the purlieus of St. Paul's and of St. Bartholomew the Great, but "Some Old London Memorials," by W. J. Roberts, revealed the fact that I was mistaken.

It is a delightful little booklet, and ought to be in the hands, or pocket, of everyone who is interested in the metropolis of the world. Country cousins, and Americans in particular, when they realise that at last they have "done" London, should get hold of this friendly and unassuming guide, and, starting at the Cecil or the Savoy, put themselves in its author's hands, merely noting the rare occasions when he gives more than a couple of lines to anything they have seen before. They will

repaid by the finished results. One of these albums is wholly filled by a series of photographs taken during a trip to the United States, and shows almost all stages of the journey, and the places visited whilst in the States. It thus forms a most complete record of the trip; and as the dates upon which the photographs were taken are printed on in conjunction with the titles of each print, an illustrated diary, as well as a photographic record, is the result.

Yesterday and To-day.

A LITTLE booklet of a very attractive character, bearing this title, has been issued by Messrs. Burroughs, Wellcome, and Co., and will be sent free to any reader of *Photography and Focus* applying for it. Primarily intended, of course, to drive home a wholesome appreciation of all the comfort, and reliability, and accuracy that is conveyed by the word "tabloid," it is none the less interesting on its own account, and quite apart from its commercial mission.

The booklet contrasts the photography of the past with that of the present, and as a help to the comparison it gives the little illustration which we reproduce. This shows the landscape photographer of about 1850 with his burden which he had to bear if he would do wet plate work in the field. We have travelled far since then; and on the road towards efficiency and comfort, the tabloid chemicals, doing away with weighing and to a great extent with measuring, have played their part.

The book is made more complete by the inclusion of a card giving the factors for time development with the different tabloid developers, which card can be hung up in the dark room for ready reference.



Some Old London Memorials.

not find much to trouble them on this score. It is a causerie upon the interest that can be discovered in the by streets of the great city, and compels the reader to note, not merely Somerset House and the Nelson Column, but the name plate of Devereux Court, the Watch House in Giltspur Street, the public house where Peter the Great fuddled himself, and that other one, whose date 1546 records the cutting up into eligible plots of building land of the strawberry garden near Farringdon Street Station.

The interest of the little book, and its attractiveness also, are greatly increased by the illustrations, which have been obtained by the author himself, whose camera has recorded, faithfully and with skill, many of the relics of old London for which he has so just and reasonable an enthusiasm. His subject is, of course, particularly rich in material for such a work as he has undertaken, but there are many more nooks of London to be dealt with, and many another city that would well repay similar treatment. Any photographer of literary bent could do much worse than take Mr. Roberts's work as an example, and endeavour to deal in a similar way with some other yet subject. I do not say that he would succeed as well, but he would at least have a most inspiring example. The best testimony that can be given it is that, its reading having once begun, it had to be finished at a sitting.

"Some Old London Memorials," illustrated with thirty-three photographs, is a most dainty pocket volume, is published by T. Werner Laurie, of Clifford's Inn, London, E.C., and sells at 2s. 6d. nett. R. C. B.



Machine and Tank Development.

Special to "Photography and Focus."

Everything is so simple and straightforward in the use of the Kodak Developing Machine and the Kodak Developing Tank, that very few possessors of these instruments are likely to encounter any of the difficulties dealt with below. Still, as the very simplicity of the apparatus leads to its constant use in inexperienced hands, it may be found useful to show the mistakes which a beginner may make, especially as when once they have been pointed out it is most improbable that any of them will be encountered.

THE mechanical or daylight method of development of roll films introduced by the Kodak Company is deservedly popular. It is based on sound scientific principles, which the Editor of *Photography* has taught so consistently in his journal for so many years. The machine, or tank, used as directed, makes the best possible negative out of each exposure, be that exposure right or wrong. The ordinary developing troubles—fog, finger-marks, frilling, insufficient density, over-development—are all done away with at a stroke.

It might be supposed that, in return, there is introduced a long list of other troubles, as an offset to the disappearance of these, but this is not the case. So long as the directions are followed—and they are very short and to the point—the machine works perfectly. The writer can, at least, testify to that. Thousands of exposures have been developed in it by him, but never once has a hitch of any kind occurred. He has, however, been asked to advise amateurs in certain cases where the trouble has been met with; and as these cases have all been due to the rationale of the apparatus being misunderstood, he has gathered together the experiences of those who have consulted him, and has put them into black and white for the benefit of other users of tank or machine.

It is hardly an exaggeration to say that anyone who reads this article carefully will only have himself to blame if at

any time any of his mechanically-developed negatives should not be all that he desires. It is not skill or practice that is needed; merely a small amount of commonsense applied to the work that is in hand.

With these few prefatory remarks, we will start with the consideration of our examples in due order.

The two negatives of the strip—prints from which are reproduced in fig. 1—represent the result of an act of extreme carelessness. The spool of film in this case has been loaded into the developing machine, or into the winding box in the case of the developing tank, upside down; that is to say, in such a position that the black paper unrolled from the bottom (as shown in fig. 2) instead of from the top.

The result was that the sensitive side of the film was brought into contact with the apron, so that no development took place except here and there, in patches, where the film was not quite flat, and so permitted the solution to work in between it and the apron and develop it in those parts. There is no remedy for a film that has been so treated, but the

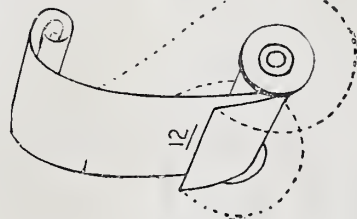


Fig. 2.



Fig. 1.—The result of putting the spool into the machine upside down.

slightest attention to the work in hand should be a complete preventive against such a thing ever happening.

Although fig. 3 looks very different from fig. 1, it is akin to it, and is an example of what may happen when the simple directions for machine development are not properly carried out. Here the loose end of the film has not been properly stuck down on the black paper. The consequence is that, in this case also, the development has taken place in patches. The curious zigzag appearance shown in this illustration is typical of the result of forgetting to stick down the film, although now and again something similar is met with as a result of the mistake illustrated in fig. 1. Sometimes, however, the film, instead of curling round as this has done, simply doubles up and does not pass into the apron at all.

The defect which is represented in fig. 4 is of a different character altogether, and is one which is met with only in the case of the developing machine; it cannot occur with the tank. A tapering strip of the film, starting at the No. 6 or No. 12 end of the spool, as the case may be, the last exposure on the roll, in other words, has not been developed at all. In the example shown, the end exposure is completely spoiled, and the black patch on the print, corresponding to a clear patch on the film, even extends

halfway across the next exposure. The cause of this is simple. All that is the matter here is that sufficient developer has not been used. The liquid in the machine must come right up to the axle, or there will be some of the exposures which will not be properly reached by the solution. If the pre-



Fig. 3.—What happens when the loose end of the film has not been fastened down.

scribed amount had been used, there would have been no trouble on this score.

(To be continued.)



Fig. 4.—The result of using insufficient developer in the developing machine.

The Latest Improvements in the Ozobrome Process.

MR. MANLY is a true inventor, and is determined not to let the Ozobrome process lose anything for want of his care and watchfulness; and he has not ceased since its introduction to study how further it can be improved. He now announces that by modifying the pigmenting solution slightly he has succeeded in making the results more uniform, and at the same time has enabled a large number of pictures to be obtained with a comparatively small quantity of the bath.

The pigmenting solution is sold in bottles which bear a number. The modified instructions apply to the contents of all bottles numbered 701 and upwards; solutions with a lower number should be worked according to the old instructions. One of the most noticeable alterations is in the use of a weak acid bath before pigmenting. The pigment plaster is first placed in a mixture of one dram of pure hydrochloric acid with twenty-five ounces of water—that is to say, a one-half per cent. solution. The time it is left in this depends upon the character of the bromide print which is being used, and may be anything from ten seconds for a very flat print to a minute for a very harsh one. The plaster is then taken out of the acid bath, allowing it to drain thoroughly, and is transferred, face upwards, to the pigmenting bath. The strength of the pigmenting solution recommended is one part of the concentrated solution to four parts of water. In this the plaster is allowed to remain for ninety seconds, after which it is taken out, drained, drawn twice across the surface of some clean water in a dish, and is then transferred to the surface

of water in another dish in which the print is lying. The two are then picked up together, taken out, and squeegeed in the way with which all ozobrome workers will be familiar. The further operations are the same as heretofore.

The introduction of the weak acid bath as a preliminary cannot be regarded as in any sense a complication, while it carries with it the very important advantage that the pigmenting solutions no longer perceptibly deteriorate by use, but will suffice for a very large number of prints, while in bottle the concentrated solution will keep almost indefinitely.

We have used the ozobrome process on and off ever since it first made its appearance on the market, and can hardly speak too enthusiastically of the power of doing carbon printing without the need for daylight which it confers on the amateur. If there are any of our readers who fancy that it is a complex or difficult process, we can only say that they labour under a complete misapprehension. Given a good bromide or gaslight print to start with, several carbon prints can be made from it by means of ozobrome in a single evening without any need for a dark room, and with no more elaborate apparatus than a squeegee, a thermometer, and one or two dishes. The improvements recently effected ought to popularise it still further.

Full particulars of the process in its present form, prices of materials, etc., can be obtained on application to Ozobrome, Ltd., 122, Allcroft Road, Kentish Town, London, N.W. We note also that the company is prepared to make and supply ozobromes from customers' negatives or prints.



Sketch Effects on Bromide Papers.

A Simple Way of Making Bromide Prints into Pencil Drawings.



BY CLARENCE PONTING.

IMITATIONS by means of photography of the brush and pencil effects of painters receive the severest condemnation from photographic critics. In some cases these are justified, though probably the purist would go further and say that one and all were bad photography.

There are instances where these brush and pencil effects of the artist, produced by the aid of photography, are very effective, and if used for the purpose intended are perfectly legitimate. It is not the intention of the writer to advocate that such effects should be exhibited upon exhibition walls, for there is a certain quantity of hand-work required on the print which excludes them from the ranks of pure photography. They are, however, useful for calendars, for Christmas cards, for menus, and other kindred articles, and as a means of decoration are much more suitable for the purpose than the direct untouched print from the original negative may be.

Having justified their existence, let me now proceed to show some methods by which they may be produced.

Probably the first that will interest most readers is the method employed by reducing those parts of the image that are not required by means of some strong reducing agent, such as ferricyanide and hypo.

In my hands this method has proved the most successful. Prints so produced might easily be mistaken for the work of an artist in pencil.

In the first instance we must have a suitable

bromide print upon which to work. Head studies will probably be the most suitable for a commencement, and these are recommended. The negative employed must naturally be one suited to bromide printing, otherwise the result will be harsh. In fact, the negative that is inclined to give a flat bromide print has behaved the best in my hands.

The bromide paper employed should also be as near drawing paper in appearance as possible.

In making the bromide print a full exposure should be given, as this tends to reduce the contrasts in the print. If one objects to too much work, a great deal may be saved

at this stage by vignetting the print, as considerably less silver will then be left to reduce.

Having left the print in the fixing bath (it is not necessary to wash it), we then proceed to make up the reducing solution. Only a small quantity should be prepared at a time, for it only remains active for about ten minutes. The reducer which I use consists of five grains of potassium ferricyanide in two ounces of hypo solution of a strength of four ounces to the pint.

This forms a very active reducer, which eats away the silver almost immediately wherever applied. If it is too strong it may be diluted with more of the hypo solution.

The print to be treated is removed from the fixing bath, laid face upwards on a sheet of glass, and allowed to drain for a moment or two in order that the surplus hypo may be removed. One must have at hand a dish of water in order that reduction may



Pencil Effect on Bromide Paper.

be arrested at any stage desired. A medium size camel-hair brush, costing 1d. at any stationer's shop, is the only article required, and this should be found in most photographers' outfits, as it is used for spotting purposes.

A sheet of glass is taken on which lies the bromide print, and this is held at an angle of 45° over a dish of water in order to allow the reducer to run off the print without affecting the other portions of the picture. In making these sketches, one should always work from the bottom of the print, otherwise the reducing solution will run over portions which one wants to retain, and the result will be ruined. Taking a brush charged with the reducer, the bottom of the print is brushed with a few broad simple strokes. As soon as the reducer has taken effect, it is quickly rinsed in the water, and the effect which has been produced is noted.

The portions that are not required are then brushed away, and the print is again thoroughly rinsed. The glass is then turned round, so that one side of the print becomes the bottom, and further reduction is carried out in the same manner. The operation is repeated with the top and other side, the print is again rinsed, and the result is examined.

At this stage it will probably be very rough, and will not have at all the effect required. It must therefore be carefully brushed with reducer in the parts which are rough or require to be softened. After every brush stroke the print should be lowered into the water to see how the reducer is acting. Finally, the fine work, such as outlining the head and removing the background, should be attempted. Extreme care must be exercised to prevent the reducer from encroaching on to the portions which do not require to be reduced, and if any part is difficult of removal it should be gone over again and again, removing the tiniest bit at each application. When lining out the head as above described, the print should be in a half-dry condition, as if it is too moist there is a tendency for the reducer to run and spoil the effect.

Black backgrounds are the most difficult to remove by this process, and sometimes leave a slight yellowness where the image was originally. For this reason a tinted bromide paper is to be recommended, for the slight yellowing will then pass unnoticed. If a white bromide paper is employed, the print may be stained in a decoction of tea or coffee before being washed and dried. If the reduction has been properly effected, the print will now have the appearance of a wash drawing in black and white.

At this stage it should be washed thoroughly to remove all traces of reducer and hypo which are still left in the print. In the washing a great deal of the yellow stain will disappear, and when dry should be nearly all eliminated. What remains may be made to pass unnoticed by the use of an ordinary blacklead pencil.

The appearance of the print may be much improved and the effect of a pencil sketch considerably enhanced if, when the print is dry, the vignette is softened off by means of the pencil, making the lines to follow the slight image which may be seen on the white ground of the bromide paper. Cross hatching is a good stroke to employ for finishing off these sketch effects, and may be seen in the illustration on the previous page.

A word or two as to this illustration may be useful to those who intend to try to obtain similar effects. In the original print the background to be removed was a black one. This was removed as described above, but occupied a long time—about an hour, in fact. The print was not vignetted in any way, the whole of the silver being reduced by means of the brush. Those who intend to make portraits with the intention of producing these sketch effects would be well advised to place a white background behind the sitter, as much of the work of reduction would then be avoided. If a number of these sketches were required, the print might be copied and the remainder produced from the negative so obtained by ordinary contact printing.

The foregoing method will be found sure and certain in its results, but it has one drawback, namely, the yellow stain that is left after a black ground has been removed. Readers who wish to try these effects may get a very similar result by

proceeding as follows: Taking a portrait negative as an example, they must first find the correct exposure for bromide paper by trial. It must be exact; not too much or too little, but exact. A print so exposed would develop correctly in the dish, but would proceed no further, no matter how long it was allowed to remain. This print, undeveloped, is placed on a sheet of glass, and then a brush, charged with equal parts of glycerine and developer, is taken, and the centre of



A BITE.

BY J. H. SAUNDERS.

Awarded first prize in the "Focus" Postcard Competition.

the print is brushed with a circular motion. In a few minutes the image will appear. Next, pure glycerine is applied to these parts with a brush. This will cause development to cease. The edges of the vignette are then developed with the first brush, and as they develop they also are covered with glycerine. In a very short time a good brush vignette will have been produced. The shape and effect can be varied at will by means of brush work, care being taken to prevent the formation of hard lines. The glycerine is then washed off and the print fixed in the usual manner.

When it is washed and dried, it may be finished with the pencil, as in the first method. This method produces no stain whatever, and the effects are easily produced. If, when exposing the bromide paper under the negative, the print is roughly vignetted, the amount of brush work required will be very small, the edges merely requiring to be smoothed off and touched up. To prevent the print slipping whilst it is supported on the glass, it is a good plan to smear the surface of the glass lightly with pure glycerine. This will cause the print to adhere, leaving both hands at liberty to work the brushes.



REGULATIONS.—(1) Envelopes must be marked "Query," and the "Enquiry Coupon" found elsewhere must be enclosed. (2) The full name and address in addition to a *nom-de-plume* must be given. (3) Only one question on one subject is allowed in each letter. (4) Prints may be sent for criticism, but a separate coupon must be sent with each print, and a stamped addressed envelope (not loose stamps) for their return. Queries are dealt with in strict rotation in the order received. Only "Urgent Apparatus" queries will be dealt with by post, for which purpose a stamped envelope must be enclosed.

REPLIES IN BRIEF.

INSULAR (Guernsey).—H. and D. 150.

C. J. KEMP (Ilford).—Your letter has been sent on.

ADON (Sandy).—At present we have no report that meets your case.

H. BULL (Deptford).—180 mm. is slightly more than seven inches.

H. H. DIVER (Attercliffe).—Thanks for the card and for your good wishes.

THETIS (Gillingham).—We know of no way other than by getting the complete set of colours.

J. WOODHOUSE (Cyprus).—(1) $4\frac{1}{2}$ inches. (2) 6 inches. But half an inch more or less makes little difference.

A. E. LARGE (Streatham).—We are as much at a loss as you are, and so have sent it on to "The Walrus."

KAMREX (Armagh).—We should get the 12 inch lens of the same make, or else use the back half of the one you have.

OPAL (West Hampstead).—Yes, we should think prepared chalk would do very well, and see no reason at all why it should not be used.

ANTI-FUZZ (London).—Thanks for a kindly letter. We are as modest as your ditty; and so do not print it. But we like it all the same.

W. HOLLIER (Dorking).—Many thanks for your kind letter. We are in complete agreement with you, and only ask you to hold on and see.

N. W. OSBORNE (Brixton Hill).—Report on Bognor will be sent if you forward a stamped addressed envelope to this office stating what it is sent for.

J. D. WAKE (Jarrow).—"The Complete Photographer," published by Methuen and Co., 10s. 6d., should be what you want. The second edition is not more than twelve months old.

A. W. WALBURN (West Hartlepool).—Thanks for your good wishes and suggestions. We are sorry to hear of the accident with the cover. The matter is absolutely in the hands of our publishers to whom we have handed your letter, in the hope that it will appeal to them.

P.O.P. (Whiffet).—If you put London on the letter, there is no doubt that it would be delayed. The name of the town is quite sufficient address, and we hardly think that the firm can be blamed until at least you have written them a letter which may be presumed to reach them.

S.B. (Ashton-under-Lyne).—A mountant that does not interfere with the gloss may be made by diluting rubber solution (as used for tyres) with benzine. It has the disadvantage that in time the rubber perishes and the prints drop off. Dry mounting is certainly the best way of all.

G.P.D. (Brierley Hill).—Mr. Martin Duncan, of 39, Bradley Gardens, West Ealing, W., has done Autochrome photomicrography. In our own experiments, and we made a few very successful photomicrographs, we gave about sixty times the exposure that would have been given to fast orthochromatic plates, using a Nernst lamp as the illuminant.

R. MANSELL (Oxton).—It is said that drying marks can be removed by bleaching the negative and redeveloping. The formula on page 34 last week would be a good one, and after washing the same developer used ordinarily might be employed to darken the negative again. We have had no personal experience of it; but have never heard of any other method suggested.

BOX 30 (Verulam).—No doubt the series now running in *Photography* and *Focus* will provide you with what you want. As far as "a formula for developing" is concerned, we cannot suggest a more suitable one for the plates you are using than that given by the maker. In asking for advice, please be explicit if you want us to be of assistance. How can we even guess what is wrong, when all we know is that you "do not get very good results"?

A. THOMAS (Crewe).—There is no remedy for a celluloid film negative that has become buckled by heat, unless the dry negative can be flattened by putting it between clean paper and pressing with a warm flat iron, leaving it under pressure until it is quite cold. This might cure slight buckling, but would not remedy it if bad. The heating points to insufficient ventilation of the enlarger, and could be remedied no doubt by arranging for a freer current of air through it. No glass would be of much service, we fancy. The lens is not likely to be injured, but if the heat is as bad as your letter suggests, it might certainly hurt the camera. More ventilation is the only cure.

DAVID C. ROOSE (Birkenhead).—Many thanks for your suggestion, which we have passed on to our publishers.

NOVICE (Hornsey).—You are no more a novice than a man who has accidentally fallen overboard is still on the ship. We have sent your suggestion on.

W. M. SAUNDERS (Sheffield).—Thanks for your good wishes. It is a most remarkable phenomenon, as you say. The "Walrus" dealt with it at some length about six weeks ago.

BYSTANDER (Urmston).—The Illustrations Bureau, 12, Whitefriars Street, E.C. The Topical Agency, 222, Strand, London, W.C. We have no trace of the other agency named.

BRUIN (Hythe).—We have sent your letter on. Panak, a sensitising solution supplied by Marion and Co., 22 and 23, Soho Square, London, W., seems to be what you require.

A. W. BRITAIN (Clifton).—The "Soho" is certainly excellent value, and of the points named neither strike us of any great practical importance. We should place them in this order I., III., II.

J. BESWICK (Birkenhead).—The matter is being dealt with at *Focus* offices, 15, Harp Alley, London, E.C., but there has been a little unavoidable delay. If you do not hear in a week or so write there.

J. E. POPPLETON (Pontefract).—We had no trouble with it, and shall have a report upon it almost at once, which may perhaps help you. We should write again; the firm replies promptly enough as a rule.

T. REYNOLDS (Marazion).—We would if we could, and quite agree with your remarks. We understand, however, that it is not practicable. It is not within our province or control, we are sorry to say.

J. D. PLEWES-PERRY (Leyton).—The process is the Sanger-Shepherd one. Full particulars can be obtained on application to Messrs. Sanger, Shepherd, and Co., 5, Gray's Inn Passage, Red Lion Street, W.C.

LIFFEY (Malta).—Place the plates in formalin 1 part, water 20 parts, in the dark for a couple of minutes. Then rinse them in three or four changes and proceed with development. Heat is undoubtedly the cause of the trouble.

W. E. JOHNSON (Manchester).—We have no data about the towns named; but you are not likely to waste much time in them, as they can each be wandered over in a day. A guide book would be a good investment in any case.

PERMISSIBLE (Woodbridge).—Special permission has to be obtained beforehand in the case of the Franco-British Exhibition; application should be made to the manager. Amateur photography at the Crystal Palace is not permitted.

E.G.D. (Nelson).—A whole page was devoted to this topic in *Photography* five or six weeks ago. You would do well to read it carefully; and you will find your questions answered much more fully than we could hope to do in this column.

HAKODATE (Glasgow).—If it is only grease that is to be removed, a gentle wipe with a little benzine on cotton wool will be all that is required; but if owing to the presence of grease, the operations previously performed on the films, development, etc., have been interfered with, there is no remedy.

W. A. SPARLING (Plumstead).—It will be best to cover over the glass roof, except just above and behind the camera, and to arrange the sidelight as shown in the article. A conservatory is not a very suitable place for portraiture, until much of the glass is covered up, as the light is not sufficiently concentrated and under control. Exposures are short, but that is its chief merit.

O. W. ASTON KEY (Hyde Park).—If the exposures with the widest slit are ascertained for each degree of spring tension, the exposures for other widths can be got with sufficient accuracy for all practical purposes by dividing the exposures first obtained by the number of times the new width of slit is contained in full width. This is the simplest method we know.

G. CHATER (Sidmouth).—The *Focus* competition is being dealt with by the late publishers of *Focus* at 15, Harp Alley, London, E.C., to whom we should write if the prints do not come to hand in a few days. Your letter hardly concerns us, as we have had nothing to do with it beyond publishing the award list. The "standard" of a competition is set by the competitors, and as far as our own competitions are concerned, there is no "vogue," either sharp or fuzzy, as you will see by studying the winning prints reproduced from time to time, which are sometimes of one and sometimes of the other kind. As regards your p.s. we have not stopped them, but shall give them from time to time. Have you any idea what is meant by "common woodcuts"?



Rothenburg on the Tauber. By James Shaw.

Every year *Photography* holds a "Great Holiday Competition," in which the prizes, in cash, range from £20, £5, down to £1. In 1906, Mr. James Shaw, of Manchester, secured the £20 prize with an account of a holiday in the old German city of Rothenburg on the Tauber. Last year, Mr. Shaw's entry was the following, which again deals with his favourite photographic hunting ground and took one of the £1 consolation prizes. Some of his pictures are reproduced this week on pages 67, 81, and 82,

H GAIN I pin my faith to Rothenburg the unique; but this time I devote myself to the numberless figure studies that are to be made amongst the delightfully picturesque settings that abound in this old city of flanking wall and soaring tower.

To the amateur photographer who is bent upon producing figure pictures Rothenburg offers many excellent opportunities; for good models and good settings for them are to be found all over the city.

In the many beautiful streets that radiate from the spacious market square—itsself one of the most picturesque I have seen—are numerous fine old mansions practically untouched by the restorer's hand. These houses in days of old were the residences of the nobility, and are rich in quaint settings for simple and effective figure studies, with the added advantage of displaying in many cases strong bold effects of daring light and shade, which tell very finely from a photographic point of view. And the people, as a rule, welcome the artist and the photographer. Permission is readily given to search after the picturesque. I myself have roamed promiscuously over house after house in search of some fine Gothic kitchen or old oaken staircase. Curiously enough, instead of being regarded as an intruder, I have been heartily welcomed and actually have been assisted in my search by the inhabitants, who were positively delighted to find that their beautiful ancient rooms were considered worthy of being painted or photographed.

I well remember finding, in one of my house hunts, a very good old oak staircase of the peculiar spiral pattern common to Rothenburg. There was a lovely play of light and shade on the stairs, and the setting simply called aloud for a figure. As figures abound in the Rothenburg streets, all I had to do was to step into the adjacent square, seize hold of the first little bare-footed fairy I could find, she came willingly enough, fix her on my staircase, and the picture was evolved under the approving gaze and outspoken comments of the entire household, who appeared on the scene like magic.

For anyone that can handle children, and get in sympathy with them, Rothenburg is a wonderful field in which to work, for the place simply swarms with the lovable, sunny-haired, bare-legged kiddies. Rarely

are they shy; they are generally very pretty, pose quite naturally and unaffectedly, and are never so delighted as when being photographed.

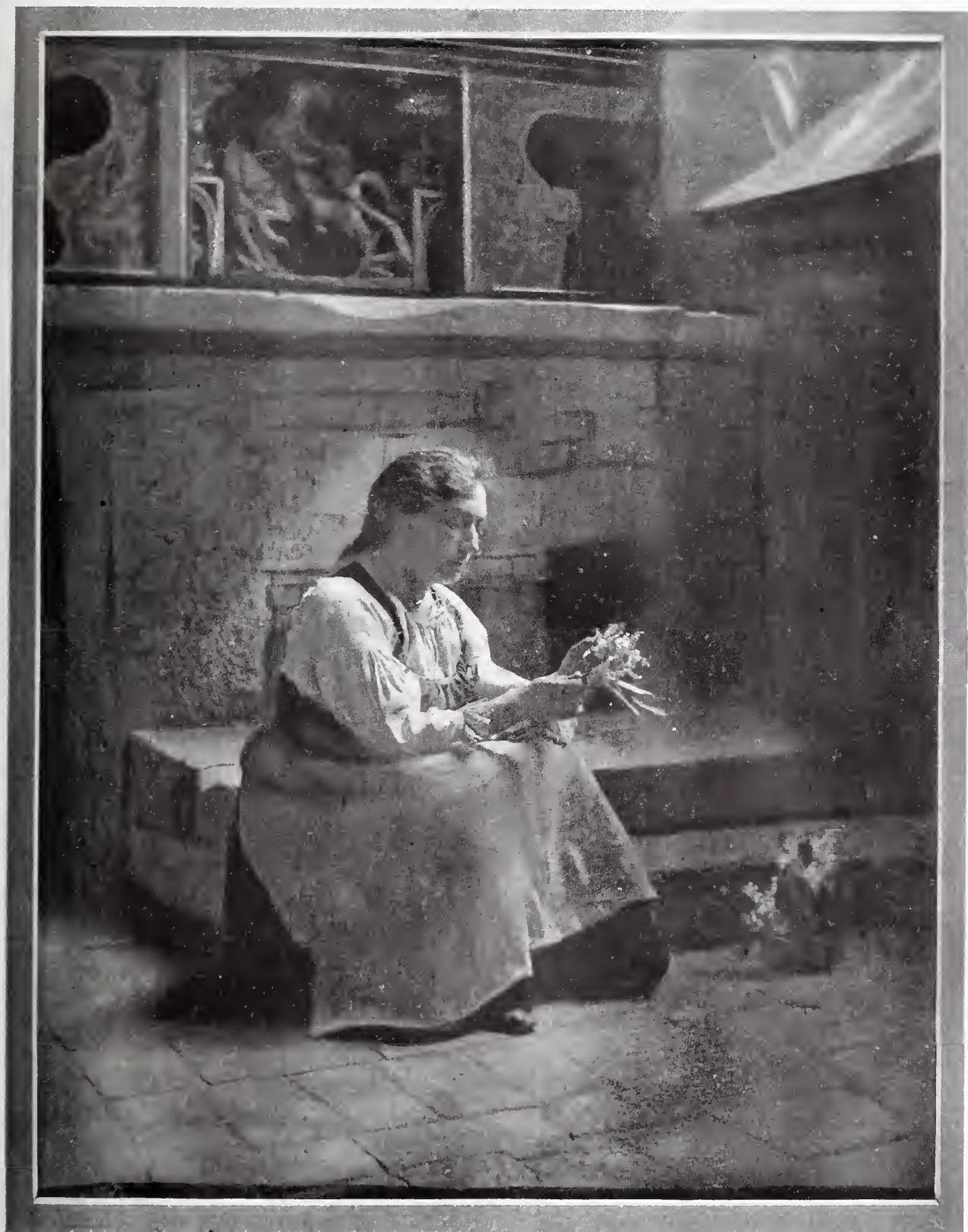
Rothenburg, once so rich in churches, still has three or four very fine old ones, practically unrestored. As a rule these old churches are very well lighted, and it is quite possible to work out many good studies with a model, using the stone altars with their beautiful carvings as settings, and yet to be able to give only a few seconds exposure.

Outside, every street will yield something of great beauty and interest for the camera. Here, it may be, one of the very quaint stable yards, with their fine massive wooden pumps and weather worn plastered walls; and if one is lucky, as I was, complete with man and horses, forming a scene worthy the skill of a Verbockhoeven. There one of the spacious halls, now used for cows, cool and shady, with wonderful Rembrandtesque effects of sparkling light and deep mysterious shadow. Or again one of the glorious gate towers, with the evening sun flashing across the rugged masonry, revealing the time-worn stone in all its beauty of colour. A moment or so of waiting, and presently comes creeping, through the deep dark arch, a creaking waggon, drawn by a pair of magnificent bullocks, homeward bent after the labour of the day.

And so I could go on and on, for Rothenburg is rich in everything that the camera man likes to photograph. Beautiful landscape, glorious old architecture, and fine figure work are all to be found in profusion in this wonderful old city of battlement, wall, and tower.

The development of ordinary black platinum paper in a bath of the composition given in the formula below is said by Dr. Jacoby to yield prints of a rich warm sepia tone. The developer is made by dissolving two ounces of potassium oxalate, half an ounce of ammonium phosphate, and ten grains of copper sulphate in ten ounces of water. The prints are allowed to remain in this developer for at least five minutes, otherwise they lose strength in the acid baths. It would be as well to note also, although Dr. Jacoby does not mention it, that prints developed to a sepia colour like this should only be treated in acid baths much more dilute than those generally used. Three baths, each applied for five minutes, and containing one part of hydrochloric acid to two hundred parts of water, are sufficient.

SEPIA TONES
ON BLACK
PLATINUM
PAPER.



FLOWERS FOR THE ALTAR (SEE PAGE 80).

BY JAMES SHAW.



Imperial Orthochrome Plates

ARE MADE IN 3 SPEEDS

- (i.) Special Rapid
H. & D. 200.
- (ii.) Special Sensitive
H. & D. 275.
- (iii.) Non Filter
H. & D. 175.

Unequalled for Spring Landscapes.

Imperial P.O.P.

MADE IN 3 TINTS

- (i.) Mauve.
- (ii.) White.
- (iii.) Pink.

Unrivalled in brilliancy, in wealth of detail,
and delicacy of tones.

The Imperial Handbook for 1908 is now ready. It gives particulars of Imperial Manufactures, and is full of photographic information useful to the Amateur.
Ask your Dealer for a Copy.

THE IMPERIAL DRY PLATE CO., Ltd., Cricklewood, London, N W.

BUSINESS NOTICES.

OFFICES.—20, Tudor Street, London, E.C. Telegrams: "Cyclist, London." Telephone: 5610 and 5611, Holborn.

PUBLISHING DATE.—PHOTOGRAPHY AND FOCUS is on sale throughout the United Kingdom every Tuesday morning.

SUBSCRIPTION.—PHOTOGRAPHY AND FOCUS will be forwarded regularly at the following rates: GREAT BRITAIN. ABROAD.

	s. d.		s. d.
Twelve Months ..	6 6	Twelve Months ..	10 10
Six Months	3 3	Six Months	5 5
Three Months ...	1 8	Three Months ...	2 9
Single Copy	1½	Single Copy	2½

REMITTANCES.—Postal Orders, Cheques, etc., should be crossed and made payable to Iliffe and Sons Limited.

ADVERTISEMENTS.—All communications on advertisement matters should be addressed—The Advertisement Manager, PHOTOGRAPHY AND FOCUS, 20, Tudor Street, London, E.C. All copy for displayed advertisements for the issue of any particular week must reach Tudor Street by the first post on Monday morning in the week previous.

PREPAID ADVERTISEMENTS.

SALE AND EXCHANGE (for Amateurs only).—½d. per word, minimum 5d.

PROFESSIONAL AND TRADE.—Three words 2d., minimum 1/-

All advertisements to be inserted on these terms must be accompanied with remittance. To ensure insertion, letters should be posted in time to reach the offices, 20, Tudor Street, E.C., not later than first post on Wednesday.

BOX NUMBERS.—For the convenience of advertisers, letters may be addressed to numbers at the office of the paper. When this is desired, 2d. will be charged for registration, and three stamped and addressed envelopes must be sent for forwarding replies. Only the number will appear in the advertisement. Replies should be addressed, "No. 000, c/o PHOTOGRAPHY AND FOCUS, 20, Tudor Street, London, E.C."

DEPOSIT SYSTEM.—Persons who hesitate to send money to unknown persons may deal in perfect safety by availing themselves of our Deposit System. If the money be deposited with PHOTOGRAPHY AND FOCUS both parties are advised of this receipt, and upon intimation of the arrival and acceptance of the goods, the money is forwarded, less a charge of 1/- for registration. The time allowed for a decision after receipt of the goods is three days. For all transactions exceeding £10 in value, a deposit fee of 2s. 6d. is charged. Cheques and money orders should be made payable to the Proprietors, Messrs. Iliffe & Sons Limited, and addressed to them at Coventry.

PUBLISHING NOTICE.—Communications for the Publishers should be addressed, Iliffe & Sons Limited, 20, Tudor Street, London, E.C.

EDITORIAL NOTICES.

ADDRESS.—All communications for the Editor should be addressed: The Editor, PHOTOGRAPHY AND FOCUS, 20, Tudor Street, London, E.C.

TO CONTRIBUTORS.—The Editor will be glad to consider original up-to-date manuscripts on photographic subjects. All contributions must be typewritten, or in very legible handwriting, on one side of the paper only, and should bear the name and address of the sender. Letters or communications arising out of matters already appearing in the paper are not paid for. The Editor disclaims legal responsibility for the safety of matter submitted to him, but he will endeavour to return rejected manuscripts, etc., when a stamped addressed envelope is enclosed for that purpose. No notice whatever can be paid to communications without the name and address of the sender, not necessarily for publication.

PRINTS FOR CRITICISM.—Readers sending prints for criticism or advice are notified that in all cases it is understood that by so doing permission is given for their reproduction, without fee, in PHOTOGRAPHY AND FOCUS.

PRINTS FOR REPRODUCTION.—Reproduction fees are only paid by arrangement beforehand. The sending of a print, without any condition stated, will be taken as permission to reproduce it without fee. The Editor will be glad to consider for publication, with or without letterpress, photographs of special interest, on terms to be arranged.

PAYMENTS.—Articles and illustrations are paid for on acceptance.

INTERVIEWS.—The Editor will be at 20, Tudor Street, on Wednesdays, between the hours of 9.30 and 11.30 a.m., but can only be seen at other times by appointment.



TO SECRETARIES AND REPORTERS.

We wish to remind secretaries and reporters that when reports are sent to us and do not appear, it is because such reports are not suited to our columns. We are always glad to give societies what publicity is possible, but abstracts of lectures or demonstrations cannot be inserted. Actual statements made by the lecturers, or details of photographic interest, are always welcome.

LECTURES ON COLLOIDS. A course of four lecture-demonstrations on "The Chemistry and Physics of Colloids" is to be given by Dr. S. E. Sheppard at the London County Council School of Photo Engraving, Bolt Court, Fleet Street, on Thursday evenings, at 7.30 o'clock, commencing on June 4th. Admission free to students of the school, others 2s. the course.

AN EXHIBITION AT PRESTON. The photographic section of the Preston Scientific Society is holding the "Lancashire Photographic Exhibition" at the Harris Free Library and Museum, Preston, from July 1st to 4th inclusive. There are six open classes, entries closing June 16th. Full particulars can be obtained on application to the honorary secretary, Mr. A. W. Cooper, 137, Friargate, Preston.

WELFORD, LTD., is the title of a company with a capital of £1,000 in £1 shares, registered May 13th, to acquire the business of a manufacturer of and dealer in photographic plates, papers, and materials, carried on by W. de Welford (*sic*) at 61, Mansfield Row, Ilford.

THE SOUTH SHIELDS PHOTOGRAPHIC SOCIETY, at its annual meeting, re-elected H. J. Hunter president, and Alf. Stephenson, of 34, Osborne Avenue, honorary secretary.

A PHOTOGRAPHIC COMPETITION, with cash prizes amounting in all to twenty-seven guineas, is being arranged by the "Girl's Own Paper."

THE SOUTHERN EXHIBITIONS will take place earlier this year than heretofore; the dates fixed for them are respectively—Southampton, October 13-17th; Hove, October 22-26th; and Southsea, November 2-11th.

SECOND-HAND AND SHOP-SOILED APPARATUS. A catalogue containing many very cheap lines has just been issued by the Westminster Photographic Exchange, Ltd., of 119, Victoria Street, London, S.W. It will be sent free on application.

HINTS ON GUM.

THE following hints on gum-bichromate work were given, amongst others, by Mr. C. Wille when he demonstrated the process before the Royal Photographic Society recently.

* * *

A good drawing paper should be used. Reeves's continuous Cartridge No. 3 does very well, as it can be put into water without any great danger of stretching with sizes not larger than 10 by 8.

* * *

Six ounces of gum, in ten ounces of water, should dissolve completely in a couple of days. If it takes longer it is hardly suitable for the process. In this proportion the gum solution keeps very well, only showing a tendency to become sour in the very hot summer months. If only three ounces of gum are used to ten of water, the mixture soon turns acid.

* * *

Gum should be dissolved in cold water by mere stirring. The use of heat tends to make the gum more insoluble, the very point to be avoided in gum work.

* * *

The gum, as bought, should be in lumps. Powdered gum is often adulterated.

* * *

Moist colours in tubes should be avoided, as with time the substance alters, and the working conditions are therefore changed.

* * *

The paper may first be sized and tinted by giving it a coating of very thin bichromate, gum and yellow or red pigment. The more bichromate the finer the grain.

* * *

One thing to be avoided in coating paper is grease. Mr. Wille was, for a long time, troubled with white spots on the paper, but finally traced them to his habit of washing his brushes in the lavatory basin, whence small particles of soap adhered to them, and were transferred to the paper.

* * *

The worker who sets out to do gum printing should avoid commercially-prepared papers, as to delegate the coating of the paper is to lose one of the most effective means of control which the process possesses.

* * *

The advice to print as long as is required to give a P.O.P. print is absolutely wrong, as the speed of the gum-bichromate paper varies. A thin coating prints much quicker than a thick one.

* * *

If by any accident a print is over-exposed, the best way to treat it is to let it soak for any time up to forty-eight hours. The advantage this enjoys over the common practice of developing with hot water is that with it there is no danger of dissolving the sizing that is in the paper, and so of altering the working conditions.

The "Klito" Hand Camera

NOTE THE NAME
VERY CAREFULLY.

THERE ARE NO BOX
FORM CAMERAS
SO DESERVEDLY
POPULAR.

The "Klito" Hand Camera is the most popular magazine plate camera in the world.

Tens of thousands have been sold and the demand is as big as ever.

There must be a reason for this continued popularity, and you will do well to look at a "Klito" before you purchase a new camera.

Look at the finish, the simplicity of the movements, test the reliability of the changing movement with a dozen plates, note the range of speeds on the shutter, and observe also that you can always **adjust** these speeds so that you can keep the shutter up to the mark.

Note too that the "Klito" is British; built in London and made entirely of wood, and well made too with all the joints clamped. That's the secret of the "Klito's" popularity.

Let us send you (free) an illustrated catalogue of the cameras we make and your dealer sells. A postcard will do to make the application on.

HOUGHTONS

The Largest Manufacturers of Cameras and
Photographic Apparatus
in Great Britain,

88/89, High Holborn,
W.C.

All
Photo Dealers
sell
'Klito' Cameras



No. 0 "KLITO," WITH RAPID
RECTILINEAR LENS . . . 21/-



No. 00 "KLITO," WITH ENSIGN
SYMMETRICAL LENS F/8 . . . 25/-

ST. LAWRENCE CHURCH, LUDLOW. A fee of one guinea is demanded for photographing in this fine old church, so the Herefordshire Photographic Society, at its recent visit, passed it by on the other side.

KINEMATOGRAPH OPERATORS. The second examination held by the Kinematograph Manufacturers' Association of Great Britain will be held on June 29th, 1908, and following days, at the Northampton Polytechnic Institute, Clerkenwell, London, E.C. Full particulars can be obtained from the secretary, Mr. J. Brook Wilkinson, Holborn Restaurant, London, E.C.

THE ULSTER PHOTOGRAPHIC SOCIETY'S April competition resulted in the first place being taken by D. J. Hogg, the second by J. B. Anderson, and the third by J. Sumner. The aggregate marks for the six months showed—(1) D. J. Hogg, (2) D. W. Elliott, (3) T. Bryan, (4) J. B. Anderson, and (5) J. Sumner. The membership during the year has been well maintained.

ANTIPODEAN APPRECIATION. The "Australian Star," the only Australasian paper having a regular photographic column, goes out of its way to say some very nice things about "The Chemical Shelf," which is a regular feature of *Photography* and *Focus*. The thoroughly practical character of the series is strongly emphasised by our contemporary.

KEEPING SULPHITE. Sodium sulphite in the solid state exposed to the air soon spoils. If after the bottle has been opened and the cork replaced, it is pushed a little below the top of the bottle, and into the circular pit so formed melted wax from a candle is dropped, the bottle can be sealed in an airtight manner, and the sulphite preserved indefinitely.

THE FINE PICTURES OF THE VICTORIA FALLS, reproduced on page 61 last week, we should have stated, were by Mr. J. Herbert Hardy, of Gwelo.

THE WATKINS DEVELOPER is now on the market, full particulars being given in our advertisement pages this week. We have it under trial, and shall report fully upon it on the conclusion of our tests.

THE FRANCO-BRITISH EXHIBITION has a number of exhibits of photographic interest, including a collection of pictorial photographs, which latter was ready on the opening day. The collection is one which should not be missed by photographic visitors.

RUSTY PLATE WASHERS can be made as good as new by thoroughly cleansing them with hot water, soda, and a stiff brush, drying, and giving two coats of Aspinall's bath enamel.

EASTMAN KODAK COMPANY OF NEW JERSEY. The usual quarterly dividends of $1\frac{1}{2}\%$ (being at the rate of 6% per annum) upon the outstanding preferred stock, and of $2\frac{1}{2}\%$ (being at the rate of 10% per annum) upon the outstanding common stock, will be paid on July 1st, 1908, to stockholders of record on May 29th.

AN OPPORTUNITY. Just as we go to press Messrs. Doughty, of 48, Savile Street, Hull, send us one of the "Minimum Excelsior" cameras, the manufacturers' list price of which is £4 4s., which Messrs. Doughty are offering, for seven days only, at 57s. 6d. This substantial reduction ought to tempt many buyers, as the camera at its full list price is thoroughly good value, and as if that were not enough, it can be had for seven days free trial. The detailed offer amongst our advertisements this week ought to be read very carefully.

A VERY COMPLETE CATALOGUE, and one that is copiously illustrated, is issued annually by the photographic department of Bishop's Pure Drug Co., 466, Holloway Road, London, N. The new edition for 1908 has just appeared, and will be found to include everything that the amateur photographer is likely to want.

CIRCULATING SLIDES WITHOUT BREAKAGE.

THE return to us of the *Photography* or the *Focus* Prize Slides at the end of a season's circulation always shows that it has only been accomplished at the cost of wholesale breakage, to say nothing of minor damage. Is this the fault of the railway companies, or are secretaries in any way to blame? That it is not a necessity we think what follows will serve to show.

For some years now the *Photography* prize slides, after circulating in this country, have been sent abroad through a round of German societies, to a large extent at the expense and trouble of a public spirited gentleman, whose name we are not at liberty to divulge. They come back from that tour practically in the condition in which they go out.

Writing us recently, the gentleman already referred to says, "What a pity it is that your English photographic clubs, or rather their secretaries, seem to care so very little whether other clubs get the prize slides in good condition or not, if only they themselves have the use of them in sound condition. A set of local slides have lately made the tour through Germany and Austria, and came back to us with one slide broken, i.e., cracked only. Surely what can be done here ought to be possible in England."

The italics are our own.



The Week's Meetings.

TUESDAY, JUNE 2ND.

Dennistoun A.P.A. Federation Outing. Stirling.
Batley & D.P.S. Hebden Valley.
Ashton-under-Lyne P.S. Wood Farm and Woods, Marple
Nelson P.S. A Night with the Enlarging Lantern.
Hackney P.S. Platinotype. G. Cepper and J. Linley.

WEDNESDAY, JUNE 3RD.

Edinburgh P.S. Annual Meeting.
Rugby P.S. Newton and Shawell.
Manchester A.P.S. Dane Valley.
North Middlesex P.S. Slide Competition.
Balham C.C. "Hints on forthcoming Outing to Horsham." A. H. Redmond.

THURSDAY, JUNE 4TH

Middlethian P.A. Annual Meeting.
Tunbridge Wells A.P.S. Open Night.
Hull P.S. Autochrome Demonstrations. Dr. J. Divine and F. J. Webster.
Catford and Forest Hill P.S. Keston.
Barrow-in-Furness Naturalists' Field C. Rampside and Piel.
L. and P. An English Journalist in America. T. Bedding.

FRIDAY, JUNE 5TH.

Liverpool A.P.A. Oxford.

SATURDAY, JUNE 6TH.

Lincoln A.P.S. Gull Ponds.
Wallasey A.P.S. Channel Cruise.
Glasgow & W. of S. Ardul.
Photo. Art C. (Aberdeen). Banchory.
South Suburban P.S. Epping Forest.
Preston C.C. Ribchester.
South London P.S. Midhurst.
Edinburgh P.S. Longniddry for Gosford.
Oliver & Idsmith P.S. Shirley Hills.
Walthamstow P.S. (a) City Church, All Hallows', Barking.
Walthamstow P.S. (b) Tower of London.
Govan C.C. Tilletudlem.
Blackburn & D.C.C. Gisbury.
U. Stereoscopic S. Winchester.
Faisley Philosophical Institution (Photographic Section). Stirling.
Attercliffe P.S. Whiston.

MONDAY, JUNE 8TH.

Woolwich P.S. Rochester Cathedral.
North Middlesex P.S. Elv.
Wattford P.S. Beaconsfield.
Barrow-in-Furness Naturalists' Field C. Seathwaite.

Societies will have their meetings announced here if the syllabus is sent to us at the beginning of the Session, or from time to time

SUPREMACY!

GOLDONA

Has secured the highest
place amongst self-toning
papers for Richest and
Most Beautiful Tones.

H. W. HARMSWORTH, Esq., of Hove, Brighton, writes:

"The print which secured the prize in the 'Photographic News' Competition was made on the first sheet of your Goldona paper I have ever used. I think this speaks volumes for the ease and simplicity in the working of your excellent paper."

Three Grades: GLOSSY: Enamelled Surface }
MATT: Smooth Matt Surface } AND
SATIN: Semi-glossy Surface } IN
POST-CARDS.

SOLE MAKERS

Write for particulars of the Goldona Competition. 23 cash prizes

OF
ALL
DEALERS

GRIFFINS
KINGSWAY
LONDON



REVIEWS

The Thornton-Pickard "Two-shutter" Imperial Camera.

THE apparatus illustrated below, a specimen of which has recently been sent to us for examination, is made by the Thornton-Pickard Manufacturing Co., Ltd., of Altrincham. It takes its name from the fact that it is provided with two separate shutters—one, the standard Thornton-Pickard time and instantaneous roller blind shutter fitted on the front of the camera behind the lens for ordinary work of all kinds, and the other a focal plane shutter, not added to but built into the camera for high-speed work.

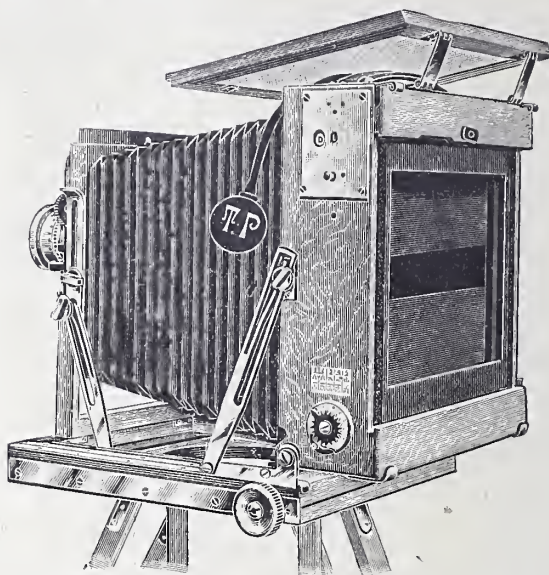
The camera itself is the "Imperial Triple Extension," with double sets of racks and pinions carrying the front forward from the baseboard and the back backward, so that in long extensions the balance of the camera is maintained. The front of the bellows has been made large enough to allow of a considerable rise and fall of the front over and above the big movement which is permitted by the ingenious method of fixing it.

There is also a cross-front movement. Both back and front are fitted with automatic spring stretchers, which lock as soon as the part which they hold is exactly at right angles with the baseboard, so that there is no looking to see if the back and front are true. When they come to the correct position they are clamped at once and firmly. The camera has a very long extension, 21in. in the case of the half-plate size, while in the other direction it can be closed up sufficiently to enable a 3in. lens to be used.

The distinguishing feature of the camera, however, is the focal plane shutter, which makes it an outfit that is so universally applicable.

This shutter is of the three-aperture type, giving exposures from $\frac{1}{35}$ th of a second down to $\frac{1}{1000}$ th of a second. The regulation is effected, not by varying the width of the slit, but by using one or other of two fixed slits and adjusting the spring tension. It is claimed for this arrangement that the liability of the shutter to derangement is thus greatly

reduced. Outside indicators are provided to show which aperture is in use and which spring tension, and a speed tablet shows at a glance the exposure which that particular combination will yield.

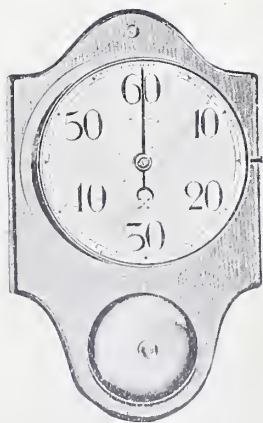


The camera in half-plate size, complete with two shutters, with a Beck symmetrical lens, tripod, and a double dark slide, sells at £5 10s., while any of the best anastigmat lenses can be fitted at proportionate prices.

The Ensign Time Clock for Time Development.

THERE is nothing more noticeable in the general trend of photographic practice than the rapid growth in favour of time or automatic development. For the benefit of those to whom its principles are novel, we may point out that the most painstaking scientific work has shown that the control over the gradation of a negative, the power of remedying over or under-exposure by changing the composition of the developer, has no actual existence in practical work. Alterations in the developer may result in the negative looking very different when it is finished; but the character of the print it will give is not altered. It is generally recognised now that to get the best possible negatives in every case the developer should be applied for a certain definite time, whether the plate is correctly or under or over-exposed. The time depends upon the character of the developer, the character of the plate, and the temperature. The subject is too wide a one, however, to be referred to at greater length here.

The general acceptance of this fundamental fact in photographic practice has led to the introduction of a great variety of apparatus for facilitating time development, and one of the latest of these, the Ensign Time Clock, we illustrate herewith. The clock consists of a board to hang on the wall of the dark room, bearing a dial and a bell. The dial has



one hand, and its circle is divided into 60, the lens being marked in large figures, 10, 20, 30, 40, 50, and 60. Beside the dial hangs a key. The action of this clock is very simple. The key is inserted in the opening in the centre of the dial, and the hand is set to the number of minutes development is to last. This setting at the same time winds the clock. The milled head in the middle of the alarm bell can be turned to wind the alarm, a single turn giving a short ring, while several turns cause the alarm to ring for quite a prolonged time, so as to be certain to attract attention, even if the photographer is outside his dark room. When the plates are put into the developer the lever at the side of the clock is moved. This starts the clock movement, and the hand slowly travels back to the zero or "60" position, and when it reaches that the bell rings, showing that the time for which the clock was set has expired.

We have already had the clock in use for some little time, and it has thoroughly justified its existence. For any development or other operation which lasts more than a minute or two, the saving of time is very great, since after setting the clock other work can be put in hand with the certainty that the completion of the process for which the clock was set will not be overlooked.

The apparatus is well finished, and the design is exceptionally neat and compact. The Ensign Clock has taken its place as an important fitting of our dark room, and we foresee for it a long and useful career in that capacity.

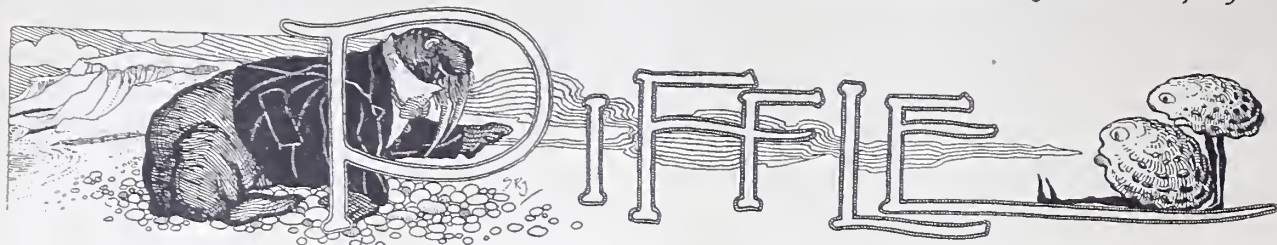
The action is so simple, and the large face and plain hand showing, not the time that has elapsed, but the time there is still to run, that the clock is certain to be a favourite for its purpose.

The price of the clock complete is 12s. 6d., and the makers are Messrs. Houghtons, Ltd., of 88 and 89, High Holborn, London, W.C.



WELLINGTON
CARBON
P. O. P.

From a Negative on a "WELLINGTON" SPEEDY PLATE.



"The time has come, the Walrus said, to talk of many things,"

HERE is a pretty general belief that photography is an expensive hobby. Indeed, so general is this belief that we may safely conclude that it is erroneous. When an opinion is unhesitatingly held by the majority of people it is almost a certainty that that opinion is wrong. This may seem a strange statement, but when we remember that a great authority has declared that the vast majority of people are fools it naturally follows that their opinions will be foolish.

* * *

Admittedly photography may be made an expensive hobby. I have known enthusiastic amateurs in the first excitement of their new pastime to spend nearly sixpence a week on it. The sixpence was absolutely wasted, too. Not that they had nothing to show for their money, but it was what they had to show that showed it was wasted. At the same time it is now possible for anyone to taste the fierce joys of the photographic art in return for an outlay that it would be absurd to call excessive. I have received to-day, through the courtesy of a distinguished member of the Royal Photographic Society, two sample outfits which will enable any uninstructed idiot to make a real photographic print. I made one myself. Easily.

* * *

In the paper envelope I found the following contents—item, one negative; item, ferro-prussiate paper in orange-coloured wrapper; item, a printing frame; item, a leaflet of printed directions. The retail price of the whole lot was one halfpenny. It must be admitted that the printing frame was somewhat on the primitive side, consisting as it did of a piece of cardboard and two tin clips; but it worked all right, for I made my print with it.

* * *

No doubt a good many readers are grinning by this time at the thought of the negative included in the halfpenny outfit. All I can say is that they are grinning too soon. I've had as much as two guineas paid me for worse negatives. As a matter of fact it was a decent professional portrait negative of half-plate size, properly retouched, and skilfully varnished. The truth of the matter is that there are a good many persons walking about at the present moment in happy unconsciousness of the fact that some grimy little street urchin is making a print of them in the sunshine of the front doorstep, the said print being washed at the neighbouring drinking fountain and subsequently exhibited for the hilarious amusement of his neighbours in the slum alley. I strongly advise all who have ever had their photographs taken to order at once some additional copies in order to ascertain whether the professional still has the negative safely in his keeping, or whether it has passed into the possession of an unauthorised amateur as part of a halfpenny outfit. (I hope professional photographers will thank me for this advice to their customers. Five per cent. would be reasonable thanks.)

* * *

And here I would ask a question. Is not the aforementioned gutter snipe who makes a blue print quite justified in strutting proudly down his alley with all the pomp and circumstance of the true artist? We are told often enough that the one thing that counts above all others in the production of a photographic picture is the personal control in printing it. Hats off, then, to little Tom Tatters.

* * *

If this question as to who is the real author of a picture ever has to be settled it will certainly lead to civil war. People have received medals for exhibition pictures who have done nothing more than fire off a camera shutter at a more or less auspicious moment, and who have no idea what they have got until they receive a framed picture and a bill for developing, retouching, enlarging, finishing, mounting, and

framing. Then they point proudly to the result and say they did it. It is a wonder the ceiling doesn't fall on them.

* * *

For my part I don't care a tinsmith's oburgation who makes a picture so long as I like it. Perhaps that is one reason why I enjoyed a little exhibition I have just visited. Three-score and ten pictures hung there, and no one could say whose they were. Nobody knows. They are fine examples of a judicious division of labour.

* * *

Who made the negs.?

"I," said G. E.,

"Because I can see,

I made the negs."

Who made the prints?

"I," said J. G.,

"To my dear sons and me

They entrusted the prints."

Who bleached them out?

"I," said C. P.,

"It's my notion, you see;

I bleached them out."

Who oiled them up?

"I," said F. C.

T. I. L. N. E.

Y. "I oiled them up."

* * *

After examining these prints I have a deeper respect than ever for the oil pigment process. It is marvellous. Why, there was one example where J. G. and Sons' print, no doubt following accurately G. E.'s negative, showed half a man right on the edge of the picture. Of course, C. P. bleached this semi-male out all right, but the intrusive human moiety would be waiting to be oiled up into hideous obtrusiveness. But Master Tilney was to be reckoned with. He turned the bisected mortal into pure landscape detail, and all by a "purely photographic" handling of the brush.

* * *

I can foresee the time when photographic dealers will keep a stock of prints all ready for oiling up. Very likely they will be sold in halfpenny packets containing also a brush and a sufficiency of pigment. The oiler-up will be considered as the true author of the resulting picture. Heaven help him. It would be absurd to attribute any of the merit—or blame—to whoever made the original negative, or the print. It is the pigmenting that counts. A chap like Tilney could take a stock print and oil it up into anything he liked; and if he found that the original subject in any way interfered with his intentions, he would just turn the paper over and work on the plain side. He does better on plain paper. I don't wish to be rude to his co-operators in print-making, but they certainly handicap him dreadfully.

THE WALRUS

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PHOTOGRAPHY. JUNE 9TH, 1908.

PHOTOGRAPHY

A JOURNAL FOR EVERY CAMERA USER.

EDITED BY R. CHILD BAYLEY.

PUBLISHED WEEKLY.

JUNE 9th, 1908. TUESDAY. No. 1,022. Vol. XXVI.



A PORTRAIT.

BY HENRY PEDDAR.



EDITORIAL

A Lens Competition.

The competition which we announce this week on page 107 is one for which every reader can enter, and, colossal though the task of judging would then be, we should be only too pleased if every reader did enter, since the value of such a vote to an editor, anxious to cater as accurately as possible for the tastes of his readers, would be very great. There are no entrance fees, no photographs to be taken. All that is needed is a list of the six different features of *Photography and Focus* in order of favour, the sender of the list which most nearly approaches the result of the whole vote being adjudged the winner.

Improving Poor Bromide Prints.

Most of the processes that are put forward for making the best of imperfect prints or negatives are hardly worth the paper on which they are printed. We write this quite deliberately. We do not suggest that, properly carried out, the final result is not better, but we do suggest that many of the processes call for more skill than is needed to make a good result at first hand, while they necessitate an outlay for materials often greater than the cost of the print or negative to which they are to be applied. The beginner who wants to do good work, and to be able to do it as quickly as he can, should therefore waste no time in trying to make his bad negatives into good ones or his poor prints better. It is not worth it. Let him destroy them or keep them as awful examples, and remember that intensifiers and reducers and clearers are hardly wanted at all when once exposure and development have been mastered.

Now and again, however, especially in the case of bromide enlargements, a comparatively costly sheet of bromide paper may bear an image that is not quite what one would like it to be, and, being useless as it is, may repay a little trouble. A method may be tried which was suggested some years ago by our contributor, Professor Namias. It has the advantage that it requires no chemicals that the photographer is not almost sure to have by him and no operation with which he may not be familiar. The first stage is to bleach the weak bromide print with mercuric chloride, just as if it were a negative that was going to be intensified, and then after well washing it, first with two or three baths of dilute (one per cent.) hydro-

chloric acid, and then with four or five of plain water, to place it in a sulphocyanide and gold toning bath of the ordinary kind. This brings it back to a dark colour (a violet-black usually), and at the same time intensifies it. The operation is completed by washing. Instead of the gold toning bath, one of potassium chloro-platinite three grains, oxalic acid thirty grains, water eight ounces, may be used in the same way.

Economical Photography.

Photographic apparatus has this fact in its favour, that it does not depreciate, at least in the quality of the work that may be done with it, by use. It may get some of its first gloss taken off it; but "handsome is as handsome does," and the photographer who wishes not to spend money unduly knows that he may do just as fine pictures with a second-hand lens and camera as with a new one. The many pages of miscellaneous advertisements which will be found at the end of *Photography and Focus* each week are well worth the careful study of the amateur who would sooner spend his money on plates and paper than on French polish and lacquer, while when it comes to the selling of apparatus that is no longer wanted, a few pence spent in a small advertisement there brings a host of replies.



MEMORANDA *for the week*

To send a postcard to J. H. Dallmeyer, Ltd., Denzil Road, Neasden, London, N.W., for an illustrated booklet, "About a Lens."

A Panoramic Picture.

The user of a panoramic camera knows that to get a perfectly truthful rendering of the subject the print must be curved to the same extent as the film was when the exposure was made, and the eye must be placed at the centre of curvature. In the great majority of exposures with such cameras the unaccustomed perspective does not matter at all, and the flat picture looks perfectly natural. Now and then it does not, and in such a case perhaps the following hint from "American Photography" may be found worth noting: "I have an idea," says the writer, "that some time, when I get something unusually effective with the 'Panoram,' I will make a good sized enlargement from it, mount it on cardboard, and curve it, as nearly as I can, to the normal curve of the picture. The next thing will be a curved frame (and here there will be both ingenuity and trouble, I am afraid), and the last thing will be to hang it in the corner of a room. It would be correct as to perspective, novel as to effect, and pretty nearly unique. I commend the idea to some owners of Panorams."

A Novel Exhibition Gallery.

Quite a new thing in photographic exhibitions was that on board the "Enchantress," the headquarters of the Motor Yacht Club, at present lying in Southampton Water off Netley. The "Enchantress," once the Admiralty yacht, has had her engines taken out, and, fitted up with club accommodation, makes a very delightful houseboat on a large scale. The committee, recognising that many of the club members were photographers, organised a competition and exhibition in the saloon of the vessel. The saloon with a large top light, and with walls hung with dark green canvas, made quite an ideal gallery, and showed the pictures at their best. We understand that the winning prints are to form a permanent decoration.

An Exhibition of Colour Photography.

Although the Autochrome process still has a monopoly of the direct methods, the rumours of forthcoming rivals continue. One, we hear, is to figure at the Franco-British Exhibition, but it has not yet materialised. On the other hand, that exhibition has by far the finest collection of Autochromes that has yet been got together. We do not know how many they make all told, but two large frames are completely filled with them. The collection is well worth a journey to the exhibition to see. Certainly no one who has not seen it can form a correct idea of the wonderful capacity of the plate. There are landscapes with most faithful rendering alike of foreground shadows and distant haze, and a marvellous picture of a fruit tree laden with white blossom against a deep blue sky. Our own private view of the collection was obtained before it went to Shepherd's Bush, but we hear that the pictures are there shown against a clear sky—the only way, in fact, by which a true idea of their fidelity and force can be obtained.

Another feature of the Franco-British Exhibition which will interest photographers is the "Daily Mirror" pavilion, where the Korn apparatus can be seen in working order under the supervision of Mr. Thorne Baker. At seven o'clock every evening the Paris office is in direct submarine communication with the exhibition, and the actual reception of the picture which is being transmitted from Paris for the "Daily Mirror" can be watched by those who time their visit for that hour.

THE EXPERT.—A REPLY.

Who prattles "art" from morn to eve,
Whose "art" makes every artist grieve
And hurriedly the Salon leave,

The Expert.

Who prates of "personal control"
And lisps of fog as "Nature's soul";
Whose *loaf* is but a penny roll,

The Expert.

Whose mounting and enlarging's done
By Messrs. Photo Brains and Son,
But who is always Number One,

The Expert.

Who crudes *faux pas* oft is making,
Who hides his ignorance in "faking,"
Yet shoals of medals still is taking,

The Expert.

Who always is so "frightfully bored,"
Except when critics laud applaud,
Who is, in fact, a wretched fraud,

The Expert.



Forthcoming Events

Societies will have their meetings announced here if the syllabus is sent to us at the beginning of the Session or from time to time.



MONDAY, JUNE 8TH.

Woolwich P.S. Rochester Cathedral.
North Middlesex P.S. Elv.
Watford P.S. Beaconsfield.
Barrow-in-Furness Naturalists' Field Club. Seathwaite.

TUESDAY, JUNE 9TH.

Wath & D.P.S. Excursion.
Oventry P.S. Oxford.
Nelson P.S. Excursion Prints
Rugby P.S. Oxford.
Darlington. Staithes.
Northamptonshire Natural History Society and Field Club. Oxford.

WEDNESDAY, JUNE 10TH.

North Middlesex P.S. "Monochrome Pinatype for Enlarging." A. J. Woolway.
Ashton-under-Lyne P.S. Committee Meeting.

THURSDAY, JUNE 11TH

Chelsea & D.P.S. "A Trip to Holland." S. E. Fincham.
Blackburn & D.P.S. Whalley Nab.

SATURDAY, JUNE 13TH.

Chelsea & D.P.S. Hayes Common and Keston.
Bristol P.C. Hanham
Bournville & D.P.S. Dodderhill Common.
Bowes Park & D.P.S. Eynsford.
South Suburban P.S. Otford and Shoreham.
Blackpool & Fylde P.S. St. Michael's-on-Wyre.
Halifax C.C. Triangle to Kishworth.
Barrow-in-Furness Naturalists' Field Club. Dalton and Haume.
Borough Poly. P.S. Wimbledon.
Woodford P.S. Amersham, Bucks
Hackney P.S. Bookham.
Hull P.S. Kirk Smeaton.
Rugby P.S. Charwelton and Badby.
Darlington C.C. Yarm.
Wallasey A.P.S. New Brighton Beach.
Todmorden P.S. Cragg Vale.

MONDAY, JUNE 15TH.

Attercliffe P.S. "Toning of P.O.P." A. Grove.
Bowes Park & D.P.S. "Landscape Composition." H. Mummary.
Southampton C.C. "Tabloid Photography." S. G. Kimber.
Wallasey A.P.S. "Photographic Apparatus: Its Use and Abuse." W. Hayes
Walthamstow P.S. Portfolio Night and Rummage Sale.
Bradford P.S. Esliolt.



A DAY IN LINCOLN CATHEDRAL

By Will Barnes

IT has been said that Lincoln Cathedral owes everything to its position. Such a statement is, however, misleading, to say the least, as both the exterior and the interior carry such a wealth of detail that even if it were situated in a valley and surrounded by squalid buildings, it would still remain a truly magnificent edifice. That its position is its crowning glory all the same, no one who has once seen it will deny, standing as it does on the brow of the hill overlooking the town, and forming a landmark not only for the city itself, but for the surrounding country. Some idea may be obtained of its position from the above illustration, which was taken from a point half-way up the hill opposite to the one upon which the cathedral stands, the city of Lincoln itself being built in and on one side of a valley.

The camera enthusiast who pays Lincoln a visit need not speculate as to whether he will be able to find material for his camera, as he can not only spend one day on the cathedral itself, but several. Having done so, there will still remain to him numerous old gateways and other quaint spots in the city itself.

Having previously written to and obtained a permit for photography from the Dean, I cycled into Lincoln one fine day towards the end of August, photographically armed to the teeth, as it were, and prepared to have a real good day inside the cathedral.

My outfit consisted of a half-plate set having the usual movements, a quarter-plate set of the plate or roll film type, the latter being accompanied by that useful accessory, the telescopic tripod, slides for both cameras charged with special rapid backed plates, and last, but not least, two exposure meters. Getting into the cathedral about 10.30, the first thing I did was to have a look round and put the two exposure meters into two places where I anticipated exposing my first two plates, choosing not the darkest corners for the purpose, but positions which received an average lighting. By the time, therefore, I had got my half-plate

set ready, and selected the best point of view, the tint in the exposure meter showed visible signs of darkening. I did not take the cap off the lens until the quarter tint had been reached, which took forty minutes. Using $f/22$, I gave twelve minutes' exposure, which was about fifty per cent. more than the exact calculated exposure, which, as I had taken an average lighting, gave some allowance for the shadows. I might say here that this procedure was followed for all the plates, the results in each case being very satisfactory.

Whilst the first plate was exposing I selected another subject, and placed the exposure meter just finished with in readiness for this. By thus alternately working with the meters much time and guesswork was saved, and most likely some plates. The average length of time it took for the exposure meters to darken to the quarter tint, inside the cathedral, was from sixty to seventy minutes.

Besides making a few supplementary exposures with the quarter-plate camera spoken of, I found it exceedingly useful to take round with me when looking out for suitable subjects, as it was fitted (as all cameras should be for general work) with a focussing screen. This was whilst the larger camera was exposing, it only being necessary to see that ladies in light costumes

did not stand for many seconds within the portion being exposed upon. If this occurred it was necessary to get back to the camera and recap the lens until they moved on. This procedure is not necessary for dark costumes, as none of these showed in the finished photographs, and no precautions were taken. Whilst thus walking round, I had several interesting conversations with tourists and the cathedral workmen

and officials, two of which talks had particular interest for me. One of the cathedral workmen was engaged in restoring and highly polishing the numerous pillars and columns, which was a particularly tedious and lengthy process, due to every portion having to be treated with some eight different stones and oils. "Ay," he said, when I passed the remark as to it



Double Arches, North Choir Aisle.

*Chapter House.*

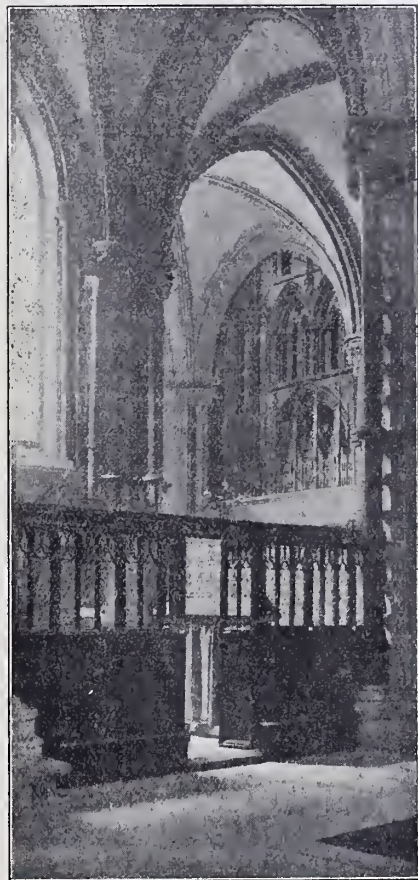
being a very long process, "I've been on this job for thirty years, and it isn't finished yet."

The other conversation illustrates system such as I am afraid few of us can confess to. A fellow photographer was putting his camera into position for a view I had just previously taken, when I asked whether I could give him any suggestion as to the exposure required, as I had recently used the meter to find the light value. He said he should like to check his notes with what I had done, and thereupon took out a small notebook, about 4in. long and about 3/8in. thick, which, when he referred to a particular page, told him that in September, 1895 (twelve years ago), he had exposed a plate upon the same view, and that an exposure of twenty minutes with $f/22$ had given him a

The pictures reproduced, except for a little shading during printing, however, are straight prints from single negatives, and need no explanation.

A letter addressed to the Dean, containing a stamped addressed envelope, will bring a printed permit, which will last four weeks, the only payments necessary being the usual sixpence to the visitors' fund, if it is desired to go in the choir. A single payment of sixpence covers the period of four weeks.

The most pleasing archi-

*Choristers' Vestry.*

correctly exposed negative. This, allowing for the increase in rapidity with present-day plates, agreed with what I had already done. But, what system! And he had not visited Lincoln since that date. How many of us are as methodical?

About 1.30 o'clock I set up my camera for a view of the choir and stalls, which I reckoned would require about fifty minutes with $f/32$. This gave me nice time to go out for lunch, and to recharge my dark slides at a neighbouring chemist's shop.

In all I exposed twelve half-plates and several quarter-plates this day, which yielded a good percentage of satisfactory negatives.

A picture of the S.W. corner and Galilee Porch had to be printed from two separate negatives.

One negative showing the portion of the cathedral through the Porch received one second exposure, whilst the one of the Porch received three minutes, both being taken from identically the same standpoint. This was in order to get detail in the upper portion of the arch.

*South Choir Aisle.*

tectural studies as a rule are obtained if the following simple hints are observed:

Don't try to get in as much as possible, but stick to simple studies and subjects.

Get the correct exposure, which is as necessary for interior architecture work as for any other subject if the best results are to be obtained.

When developing, avoid excessive contrasts and get a negative of medium density.

When the final print has been produced, don't be afraid to trim it freely.

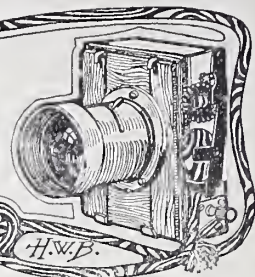
MENDING VULCANITE DISHES.—

Unless the dish is a large one, it is hardly worth the trouble of repairing; but if it is considered advisable the best cement that can be used is a solution of pure rubber in chloroform. Failing this, the rubber solution sold for repairing cycle tyres may be used, and a patch of rubber coated tape, applied outside the joint, will help to make things secure.

EXPOSURES IN HIGH SPEED WORK.

BY ADOLPHE ABRAHAM.

The third of a series of short articles on focal plane photography. The preceding articles of the series appeared in "Photography and Focus" for May 29th, 1908, on page 33.



THE entire subject of exposures for high-speed work may be summed up in the statement that one gives the slowest exposure consistent with the velocity of the moving object. It is, of course, the displacement upon the plate which is of consequence, so that as factors, which guide us to the maximum exposure permissible, we have:

The focal length of lens,

The distance of the moving object from the camera at the instant of exposure,

Its direction of motion with reference to the camera, and

Its velocity.

A formula has been given which enables one to calculate the necessary exposure when all these factors are known. This is a scientific method, but has the obvious objection that in 99% of cases we do not know the velocity of the moving object. Besides, we seldom have an opportunity to perform such a calculation in time, and if we could do so, the result obtained would generally be found to be some quite impracticable fraction. Finally, it is calculated on a basis of maximum displacement negligible upon the plate, and various observers differ as to how much is permissible.

A second guide to exposure is given by a table for objects of different speeds. Such a table may be found in Messrs. Burroughs Wellcome's Exposure Guide. Now, the chief objection to any table or other guide is that even if we know the absolutely correct exposure in the circumstances, no focal plane shutter can be expected to give anything more than relative exposures. The $\frac{1}{1000}$ sec. registered may be $\frac{1}{811}$ sec., or $\frac{1}{1094}$ sec., or some such fraction, and so on.

Each and every exposure one makes must depend upon the judgment, not so much regarding the velocity of the moving object as of the capabilities of the shutter. By experience one learns to recognise that the exposures indicated are not merely approximate, but convey no definite fraction of a second to the mind. For example, the exposure called $\frac{1}{1000}$ sec. comes to be regarded simply as one which is used for certain definite occasions, not as this particular fraction of a second.

It is obvious that, in some cases, an exposure will be given that is more rapid than the subject actually requires; and, in general, it is wiser to err upon this side, for blurring is inadmissible.

There is such a thing as artistic blurring, "to suggest motion," but microscopic sharpness is the first consideration, and motion must be left to suggest itself in the spirit of the picture, not in the evidence of movement during the actual exposure. My experience is that focal-plane workers tend on the whole to give too rapid exposures; it must be remembered that one is often misled by mistaking, for blurring through insufficiently rapid exposure, what is often only inaccurate focussing.

It is perfectly useless to expect to buy an entire camera for the price of a really good focal-plane shutter. There are several good makes on the market, all with a reasonable variety of speeds. It does not matter what these speeds actually are so long as they bear an accurate relation to one another. For example, what purports to be $\frac{1}{1000}$ sec. must be approximately half the speed indicated as $\frac{1}{4000}$ sec.

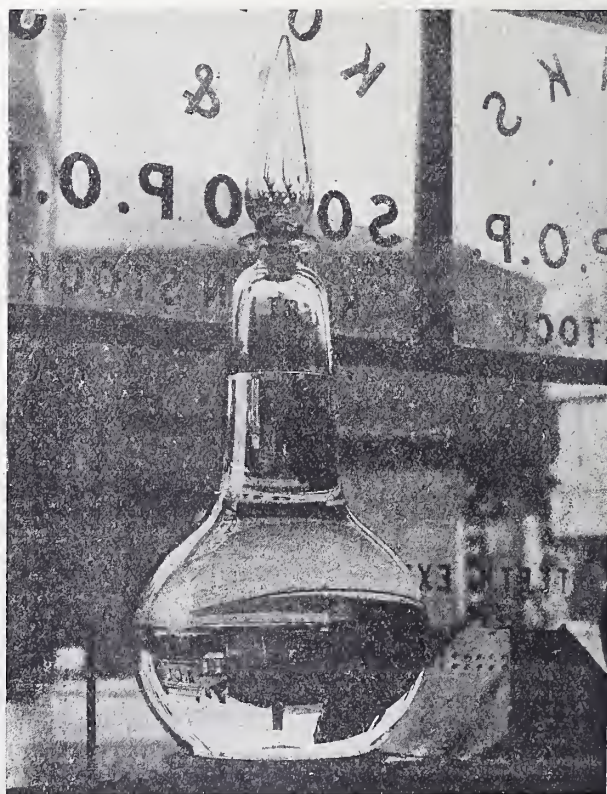
It is perhaps an ignoble sentiment, but the photographer very naturally wants to show off what he can do with a forty

guinea reflex, and he wants to produce results which a five guinea apparatus certainly could not effect. Therefore, he always aims at standing as close as possible to the moving object after he has once acquired sufficient skill in "timing." From eight to ten yards is the nearest one should ever attempt.

There are some subjects which are much too rapid to photograph at close range, even at $\frac{1}{1000}$ sec., e.g., a flying golf ball, or the swing of the club in a drive; but with these and one or two other exceptions there are very few opportunities when one ought to require the shutter to work faster than the regulation $\frac{1}{500}$ sec.

It is unsatisfactory to have to end by reiterating that one must study his own shutter and teach himself to judge the necessary exposure; and all I can do is from time to time to suggest approximate speeds for different subjects considered. It must be borne in mind that one has not to calculate an exposure solely from the forward motion of the subject, but special movements are often involved, as of the limbs in jumping, which make it necessary to shorten the exposure considerably.

A PICTURE IN A PICTURE.



A wonderfully perfect image of the street beyond can be seen upside down in the glass jar. This interesting photograph is sent us by Mr. J. Evans, of "The Pharmacy," Tisbury, Wilts.



THE LLYN STREAM

BY W. McWILLIAM.

Awarded a Prize in the "Focus" Landscape Competition.



A CRITICAL CAUSERIE.

By "The Bandit"

Concerning some Photographs by Beginners.

"Critics I—appalled I venture on the name,
Those cut-throat bandits in the path of fame."—BURNS.

TO come across a fine example of artistic photography is refreshing in these days when every cheap tripper uses a camera and produces—well, produces results which are not fine examples either of photography or of art. But far, far more refreshing is it to meet a photograph of an unusual subject (although as a pro-Art man I may be deemed a traitor for making such a statement).

Pictorial Perfection is rare—but not so rare as Novelty of Theme. And this is strange when we consider the enormous number of snapshotters who have never seen either the Salon or the R.P.S. exhibitions. Amongst the *habitués* of these shows it is little to be wondered at that we should find grooviness—the old sunsets and woodland scenes and Ely Cathedrals photographed over and over again in the same way and with the same lack of inspiration. But surely the scattered Kodak-users and Ensign-ites—the everyday button-pressers who care nothing for London shows, and couldn't distinguish a Cadby from a Coburn—surely these might produce, from time to time, some work out of the common?

Just because they have never seen



Happy Families.

By Lieut. H. G. Good, R.N.



Tired of the struggle.

the work of the "masters" they ought to succeed. Just because they are isolated in the country, or in what Londoners vaguely call the provinces, they ought to be at a positive advantage. They have nothing to imitate, therefore they can create their own "school," without the fear of being told that they are breaking any canon of academic Salonism.

In theory, I say, these scattered bulb-squeezers (and especially those amongst them who are absolute beginners) ought to produce extra original work. Novelty of subject ought to be the peculiar distinguishing mark of the beginner's attempts; and the beginner's results should therefore be ever so much more interesting to examine than those of the well-known exhibitor. So it seemed to me when I took in hand my task of criticising the prints submitted for the *Photography* competitions. The vast majority of these prints come from places where the Salon is an unheard of myth, and the R.P.S. a mere echo of a name sometimes seen in the papers. *Ergo*, I should find, every time I got

a batch of prints from our editor, some new and startling theme, some subject which I had never seen before, some idea, crude, perhaps, and in itself commonplace, but new—deliciously new—as a camera exercise.

Alas, human nature is the same amongst photographers as amongst ordinary sane members of society (as "The Walrus" would sarcastically put it). By some mysterious means isolated photographers learn what other photographers are taking, and then go and take ditto. There is no more originality of subject amongst these piles of beginners' prints than there is in a mile of West End showcase portraits. We are an imitative race; and when Mr. Beginner has done a family group and a portrait of Aunt Jane, and pussy sitting on a cushion, and the farmer carting hay, he is quite satisfied with himself and with the use he is making of his camera.

I have sought long and diligently through the lump of prints in my basket, and picked out a few which are to some extent creditable exceptions to



The Scarecrow

By J. R. Stubble.



Our Gardener.

By W. W. Knowles.

this rough generalisation. They're very, very few; and because they are few I feel inclined to do nothing but sing their praises.

Here is one called "Happy Families"—a scene in what is called, I suppose, a swannery. I have never seen a swannery, and I have never seen a photograph before of a swannery and I am sure that if chance had led me to this swannery I should have murmured to myself, "A pity this is so ugly, and there are these horrid posts and wire netting: I'd have got some lovely snaps of these swans if they had been swimming on a lake"; and I should have departed sorrowfully, with my plates unexposed. Not so this beginner. He saw his subject and took it: a plain, unvarnished statement of the appearance of a swannery; and here we have his print—full of information, full of interest, and, when you come to look at it, by no means unpictorial. How bright and fresh it is compared with the ordinary swan-picture which I should have looked for—the lake and the swan floating on it, and the swan's reflection in the water and the evening sky carefully printed in: all the everyday banal business which you can get in any postcard shop at a penny apiece!

"Tired of the Struggle" is an attempt to be dramatic, and barely succeeds, but it is another capital example of the work of a man who declines to do as his neighbours do. His lens is short in focus, or his room is too small; the view, at all events, is wide-angled, and we get distortion of the figure exemplified in the largeness of the legs and feet and the smallness of the hands and head. The accessories, also, seem per-

haps over-conscientiously arranged and chosen, and the violin case (?) under the table does not tell its story clearly (in fact, I thought at first that it was part of the table), but none the less this effort is worthy of praise. It is the production of a rebel—a rebel against the dominion of the family group and Aunt Jane and the pussy. I hope the rebel

In "A Corner of the Lace Market" we have another sample of a "thing seen" (like the Swannery), but unfortunately, in this instance, not so well seen. If it is really the photographer's own impression of a lace market, then it won't hold water, metaphorically speaking. The lace is there, I grant; but the two larger figures monopolise one's attention and the lace vanishes. Moreover, the said figures are badly placed. It may be argued that they balance each other, and that is true. But they balance each other over accurately. A drawing of a pair of scales is not interesting if the pans are hanging at an equal height. It is a mere diagram. Depress one pan and send the other aloft, and the drawing becomes significant, and even, one might say, pictorial. If the small boy had been nearer the large girl, all might have been well. Even then (let me add) I doubt whether the picture would have lived up to its name, the "Lace Market."

"The Scarecrow" is another novel notion which does not touch the spot with firmness. Technically, there is nothing to say about it, beyond the fact that it is a trifle under-exposed, and consequently hard. But the scarecrow and the small damsel are surrounded by too great a multitude of highlights. Further, the scarecrow is doing no scaring; it has a benign aspect of being made for show rather than for the hard work of alarming

birds. It may have been a real scarecrow; but if so, the scarecrows in Yorkshire (where the author of this picture comes from) are more refined than those in the South. I can't help thinking that the inventive genius which went to conceive this picture



A Corner of the Lace Market.

will try again. Meanwhile, I think he'd do well to trim off the feet and legs just above the line of the violin case. It may be "against the rules" to leave the figure so unsupported; but never mind the rules.

would have been better employed on the ordinary stick and ragged coat and billycock hat which one sees forlornly drooping in the midst of the average ploughed field than on this gentlemanly effigy.

Moreover, in the ploughed field we should have had a sound background, without spottiness, and the *dramatis personæ* would have stood out distinctly and well. Here they look, to be frank, a shade like a humorous interlude in a prettily-staged musical play, and we can almost hear the little comedienne singing her song: "Naughty Mr.

Scarecrow, why don't you give me a kiss?" or some similar edifying words. This isn't life, it is a parody of life.

"Our Gardener" is life, real life; and I include it in my selection because it is a total failure pictorially (the striped overall is far more visible than the lad who wears it), and a complete success as a record of precisely the sort of jolly little incident that a parent would love to treasure. It is a more honest portrait of the child than any studio effort would or could have been, though his face hardly shows. But his character shows, and his busy,

happy nature shows. I hope the photographer who took this never commits the crime of making his son put on a Lord Fauntleroy suit and brush his hair and pose stiffly on the front doorstep. Perhaps he has tried, and that is why he now does this sort of thing? Well, if so, I don't wonder.

None of my five chosen prints are very original, but in each is evidence of at least some small wobble out from the groove. And it is to such wobblers (maybe unconscious wobblers) that we shall look for the finely unconventional masterpieces of the future.



WRINKLES BY AN OLD STAGER.

ON THE DAYLIGHT PRINTING OF P.O.P.

In spite of the popularity of gaslight and bromide papers, there is a satisfaction about seeing the gradual appearance of the image in all its softness and gradation, which is only experienced by the user of

P.O.P. I suppose we all make P.O.P. prints at times, and all have met with some difficulty or another in doing so.

Print in the Shade.

There is one wrinkle which is so often given that it is hardly worth calling by such a name, but it is so frequently neglected that it is just as well to repeat it—it is, never to print in direct sunshine. Not only does this mean that the prints will have less vigour than if made in the shade—that is sometimes an advantage—but the printing is not so easily controlled; any trifling defect on the glass is reproduced on the print, and a valuable part of the picture may be spoilt by the shadow of the printing frame.

The Use of a Duster or Focussing Cloth.

Wrinkle No. 2. Do we make as much use as we might of the power of modifying the print by shading it during exposure? This is of all the advantages of daylight printing the greatest. A duster or a focussing cloth may be kept over the parts which are to be held back while the rest are printing, and in this way one part may be darkened without that general degradation which follows sunning down. But the cloth must be kept moving, so as to avoid any signs of a sharp edge to the shaded part.

Examine in the Shade.

A P.O.P. print will sometimes have one-half distinctly darker than the other. We are apt to forget that the paper is actually very sensitive, and that by looking, to see how printing is progressing, too deliberately or in too strong a light, will make a discolouration that may not be noticed at the time, but will show as soon as the print is taken out of the frame altogether. To note the progress of printing, the frame should always be taken under cover, where the light from the sky does not strike down on it.

The Use of a Pad.

Another defect sometimes seen is a lack of sharpness in the middle of the print, due to the back of the frame not having been applied with sufficient pressure. The springs

get weak in time, or the back warps, and the pressure of the spring at one part may actually lift the back away from the paper at another. It is a wrinkle worth noting, to put a few pieces of clean smooth blotting paper, cut to size, in the frame to back up the print, and cause it to press evenly on the negative.

On Opening the Back of the Frame.

Another hint that may save a print. When opening the back of the frame to see how the printing is getting on, one should always hold the negative and the half that is not being opened firmly together with the left hand. This makes sure that the paper does not shift on the negative.

Ought Not to be Necessary.

Ought it to be necessary, I wonder, to point out that the glass side of the negative should be carefully cleaned before printing? It ought not; but it may be as well to do so.

Against having the Paper Too Large.

The printing paper ought to be cut neatly—a little smaller than the plate. In these days of packets of cut pieces this is generally the case. The reason for mentioning it is merely that if the paper is a tight fit in the frame it will be almost impossible to pull it back to examine it without shifting it on the negative.

Before putting the Frame out.

For the same reason, when a frame has been filled, and before it is put out to print, it ought to be tried to see that the back is so put in that it can be opened freely at either end. If not, the paper is almost sure to be moved in the examination.

"Sheenette" Lilywhite P.O.P.

EVERY make of photographic paper to-day has to be issued in a "semi-matt" or "carbon-surface" grade, if it is to meet all tastes, as the demand for this very agreeable character of surface is a growing one. The title selected by the Halifax Photographic Co. for the semi-matt Lilywhite P.O.P. is "Sheenette," which as a diminutive of "sheen" is both new and distinctive.

The "Sheenette" paper submitted to us for trial we found to be satisfactory in every way. More than this it should be unnecessary to say. Full directions for use are given in each packet, and following those it is difficult to see how the merest beginner, even, could go very far astray.

The Halifax Photographic Co. asks us to note that it now occupies new and much larger premises than heretofore, at New Brunswick Street, Halifax.



Machine and Tank Development. II.

(Continued from page 76.)

Special to "Photography and Focus."



THE cause of the defects in figs. 5 and 6 is closely akin to this; in fact, it is the result obtained when insufficient developer is used in the tank, either from a short supply or from splashing and waste. In such a case the top edge of the film is above the level of the liquid, and so does not start to develop until the tank is reversed. The edge that until then has been the bottom edge then becomes the top, and is above the developer, so that it is less developed than the rest. In consequence, we get the centre of the roll of film properly developed, while on the two edges the film is insufficiently developed, and so prints darkly. In No. 5 only one edge has suffered very much from this defect, showing that this—the dark edge—was out of the developer much longer than the other.

Waste of solution will be prevented if we remember always to allow the reel to sink gradually into the tank by its own weight, not pushing it down, which may result in making the liquid overflow.

The older model of tank developer was not reversible, but the reel formed by the apron containing the film was reversed. In such apparatus, if the solution, when the reel is inserted, only just comes to the top of it, care must be taken not to spill any of the developer, or the same trouble may arise. The full amount of solution should always be used, and then no such defects will be experienced.

It is only under exceptional circumstances that the result shown in fig. 7 will be met with. The illustration is printed from the end of a long film, and it will be seen that one end has not been developed at all. This has happened because the apron was connected up too soon; that is to say, before the word "stop" had appeared. The result was that a certain length of the apron was used simply to expose the black paper and not the film to the action of the developer; so that, the film being a long one, requiring nearly the whole length of the apron, one or two of the negatives at the No. 1 end of the film extended beyond the other end of the apron. In consequence they came into contact with the brown paper, and were developed not at all or only very imperfectly.

In the centre of the stone fountain in fig. 8 is an oval black spot, which on



Fig. 6.—Showing the result of using too little developer in the developing tank.



Fig. 7.—This shows the first and part of the second exposures on a long film, defective because the apron was connected up before the word "stop" appeared on the black paper.



Fig. 5.—Showing the result of using too little developer in the developing tank.

the film itself is practically clear glass. This defect, mysterious as it may seem at first sight, is, actually, capable of receiving a very simple explanation. The spool when it was taken out of the camera was allowed to become very slack, and the end of the film was stuck down to the black paper without tightening it up. This means that there was a superfluity of black paper over the film, and as it had to find accommodation for itself somehow, it doubled up, and forced up that part of the film lying above the fold until it came into contact with the underside of the apron. This it has done in an oval patch in this case, which therefore has escaped development.

One other example of the result of ignoring instructions will bring our catalogue of them to a conclusion. If fig. 9 is examined it will be seen that there are white streamers or a white line bordering the sky—an effect which, when it is met with at all, is most conspicuous wherever the landscape or the sky line is itself dark. In the negative, of course, these streamers are black. Their cause is easily located. They result from omitting to reverse the reel or tank, as the case may be.

The explanation of this phenomenon is probably that, owing to the emulsion in those places not having been acted upon by light, the developer there has not had any work to do,



Fig. 9.—The streamers show the effect of not reversing the tank or roll from time to time during development.

and preserves practically its full developing force. The developer in the adjoining portions of the sky has had a good deal to do, and so is partly used up. By diffusion (which would have been largely prevented by turning the reel or tank from time to time) the unused solution works downwards, and so does more work in the sky portion, which the practically spent developer already there was no longer active enough to do.

It will be seen that in every single instance these defects

have been brought about by neglect of the very simple instructions which are all that are required for machine or tank development, or else by thoughtlessness on the part of the photographer. They exhaust the list of troubles that are at all likely to be met with at any time, and the mere recapitulation of them here should be sufficient to remove all risk of them arising. They are not due to lack of skill on the part of the user, since none is wanted to use either the machine or

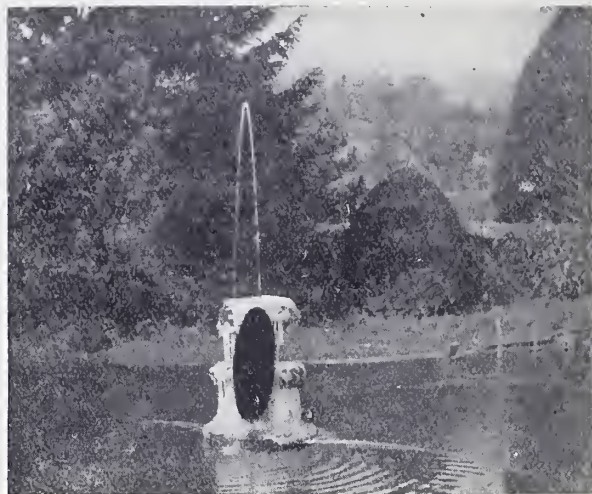


Fig. 8.—This black spot has been caused by allowing the spool to get very slack, sticking the end of the film to the black paper without tightening it up.

the tank, but simply to overlooking, for the moment, the simple conditions which are all that are needed to lead to success.

CORRESPONDENCE



The Editor is not responsible for the opinions of his correspondents.

TRIMMING MULTIPLE MOUNTS.

Sir,—I regret to see when reading Mr. E. B. Wedmore's letter in the last issue of *Photography and Focus*, referring to my article on 'Trimming Multiple Mounts,' which was published in *Photography* on May 5th, that I had omitted to give the dimensions of the set-square from which I had worked out my calculations for obtaining certain widths of borders.

Mr. Wedmore's remarks and figures are quite correct, and I was simply quoting figures worked out with the set-square I always use. The dimensions of the set-square to give the results I quoted should be: The side AB a length of $10\frac{1}{2}$ in., and the side BC a length of $3\frac{1}{2}$ in., and, as I stated in the article, a set-square of these dimensions can be obtained from Messrs. Cox and Coombes, of Devonport and Plymouth.

Wishing you every and continued success in the amalgamation you have recently brought about,

Yours, etc., T. MALCOLM WALKER.

LOOKING AT PICTURES UPSIDE DOWN.

Sir,—I beg to join issue with you on the subject of studying a picture in the reversed position in order to judge the value of its composition. I do not think it at all follows that a picture properly composed will present an equally pleasing balance either way up, and as regards the reversal of the image on the focussing screen, I fancy there must be many to whom this reversal is a source of trouble—certainly, I can never reconcile myself to it. I have often thought of carrying a piece of silvered glass in my kit, with which it

would be possible to reflect the picture on the screen right way up, and it is only reluctance to add anything more to an already bulky outfit which has prevented the adoption of this plan. I find it impossible to judge the value of masses in a picture upside down, and generally get over the difficulty by lowering the camera to such a level that I can crane over it from above, and so see my picture unreversed, but this is a method which would be impracticable to anyone less generously endowed with inches than myself.

I have heard it said that a top-heavy effect observable in much amateur landscape work may be attributed to the reversal of the image, as in the ordinary course one wants more weight at the bottom than at the top, and to effect this means, of course, having the weight at the top of the screen. It follows that a composition having the weight at the bottom will be by no means pleasing when seen reversed, and, therefore, I do not see that much practical benefit would result from studying a picture in that position, excepting as regards balance of sides, i.e., right and left.

I have not seen Mr. Sutcliffe's remarks in the *Yorkshire Post*, and it is possible that I may have misunderstood you and him; if so, I tender my apologies. Yours, etc.,

SYDNEY J. TAYLOR.

Every reader has his opinion of the relative value of the different features in "*Photography and Focus*." A signed copy of "*The Complete Photographer*" is offered as first prize in the Contents Competition (see page 107). No entrance fee.

HOLIDAY INFORMATION.

WITHERNSEA.

Have you any information as to WitherNSEA which you could let me have?—TYKE.

Withernsea, a rising watering place, lies twenty miles by rail from Hull, and about fifteen miles from Flamborough Head and from Spurn Point. Its principal attraction as a watering place is the purity and bracing character of its air.

The district of Holderness, of which WitherNSEA is the largest town, does not boast of much beautiful scenery, the country being flat, or only slightly undulating, and given up to agriculture. There are excellent roads for cycling in all directions, the riding being very easy. Some of the best cycle rides are Hollym, two miles, with a church and farmhouses; Holmpton, a pretty village, four miles; Easington, ten miles, an old-fashioned place with an ancient church and cottages; Spurn Point and lighthouse, six miles beyond Easington. Patrington is five miles from WitherNSEA, and has a beautiful old church and spire, called the "Queen of Holderness." The foxhounds meet here once in the season.

To the north and west lie Roos, a pretty village with a fine church, well worth a plate or two, Halsham Winestead (two miles), with its old hall and moat, and Rimswell (two miles). Holderness is a quaint district, both as regards its villages and its inhabitants—there is only one railway through it, the line from Hull to WitherNSEA—and affords a wide and varied scope for the camera.

In WitherNSEA itself is its lighthouse, 127 feet high, a promenade with the entrances of a pier, designed after Conway Castle. The pier itself was destroyed some years ago. The sands are good, and there are cliffs from which is a fine view of the coast from Flamborough Head southwards towards Spurn Point. There are four hotels, the Queen's being the principal one.

T. G. Twigg, chemist, Queen Street, has a good and varied stock of photographic apparatus and material, and provides a darkroom.

WELLS-NEXT-THE-SEA.

Kindly let me have particulars of the photographic possibilities of Wells-next-the-Sea, Norfolk.—W. PEARSON.

The town of Wells-next-the-Sea, and the beautiful country round about it, only require to be better known to be far more fully appreciated. Wells has often been compared to a Dutch town. It possesses a small harbour, and at one time a good deal of shipping trade was carried on there, but of late this has considerably diminished, and now it is only seldom that more than three vessels are to be seen in the harbour at one time, although a number of fishing boats go in and out as the tide allows. Both ships and boats offer excellent opportunities for the camera, as the photographer has a very wide choice of position.

The harbour is more than a mile long, but is not so broad as to prevent a vessel being taken in any part of it, or if preferred, even before it reaches the harbour bar. Sometimes the quay itself presents a busy aspect, and offers photographic subjects.

The town itself has provided material for more than one academy picture, the east end is the more attractive. The butt lands, an open space where in bygone times the youth assembled to practise archery, are planted with trees and provided with seats and a bandstand. Some effective views of the surrounding country are to be got at several points in the town, and a good one of the town itself from the harbour bank.

To the west of Wells, and adjoining it, is Holkham. The park is open to the public at stated times, but admission can be obtained at others very often on application. Just beyond the Holkham Park wall one enters the village of Burnham Thorpe, the birthplace of Lord Nelson, and containing the Nelson Memorial Hall, etc. The house in which Nelson was born has been demolished, but the church in which he worshipped is still standing. It contains a recently unveiled bust of the hero, the font at which he was christened, a lectern made of oak from the *Victory*, etc.

A few yards from the Thorpe boundary, and about four hundred from the spot where Nelson first saw the light, stands Creake Abbey, the finest ruins in the neighbourhood, and well worth the photographer's attention. Whichever direction may be taken, something of photographic interest may be encountered. Holkham is the seat of the Earl of Leicester, and is a stately hall standing in a magnificent park with a lake and waterfall. At the park gates the almshouses form a subject for the camera, upon which hundreds of plates have been exposed. There is the pretty village of Old Holkham—New Holkham lies on the opposite side of the park and consists of a few houses only—the Triumphal Arch, the "Golden Gates" and park lodge, Palmer's Lodge, and the avenue of ornamental trees and rhododendrons leading to it, etc., etc.

East of Wells are other picturesque villages. Stiffkey, with a grand old hall, and Binham, with a fine abbey. To the south lies Walsingham, at one time an important Roman Catholic town, and one to which even now pilgrimages are made. Subjects for the camera here include the Abbey, Wishing Wells, and Priory. Adjacent is East Barsham, which contains an old hall of a unique character, a building which is said to have been erected during the reigns of Henry VII. and Henry VIII.

Plates can be obtained from G. Poll, chemist, Wells; G. R. Bray, chemist, Burnham Market; and W. Heyhoe, chemist, Walsingham. The two former have darkrooms available, and I would allow the use of my own at North Creake. Accommodation can easily be obtained in Wells or the neighbourhood, and I could, no doubt, recommend rooms to anyone who wrote me on the subject.—J. W. SMALLS.



Ortol Developer.

Equal parts of the two following solutions are mixed together for use:

(1.)	
Potassium metabisulphite	35 grains
Water	70 grains
Water	10 ounces

(2.)	
Sodium carbonate (crystals)	1 ounce
Sodium sulphite (crystals)	1 ounce
Potassium bromide	10 grains
Water	10 ounces

Ink for Writing on Negatives.

If the following ink is used to write on the film of a negative, and the negative is then immersed in an ordinary fixing solution, washed and dried, the written letters will be reduced to clear glass, and will print black.

Potassium iodide	100 grains
Water	1 ounce
Iodine	10 grains
Gum arabic	15 grains

A Yellow Light Filter.

An unexposed plate, preferably a lantern plate, is fixed out in clean hypo, washed, and dried. It is then soaked for two minutes in

Naphthol yellow	5 grains
Water	10 ounces

The plate is then rinsed in water until of the tint desired, dried, and bound up like a lantern slide.

Schlippe's Salt Intensifier.

After bleaching with mercury in the ordinary way and well washing, the plate is darkened in

Water	1 ounce
Schlippe's salt	15 grains
Liquor ammonia	5 drops

The negative is then washed and dried. The intensification with this formula is very great.

Substitute for Ground-glass.

A clean piece of plain glass may be substituted for the ground glass focusing screen by pouring over it

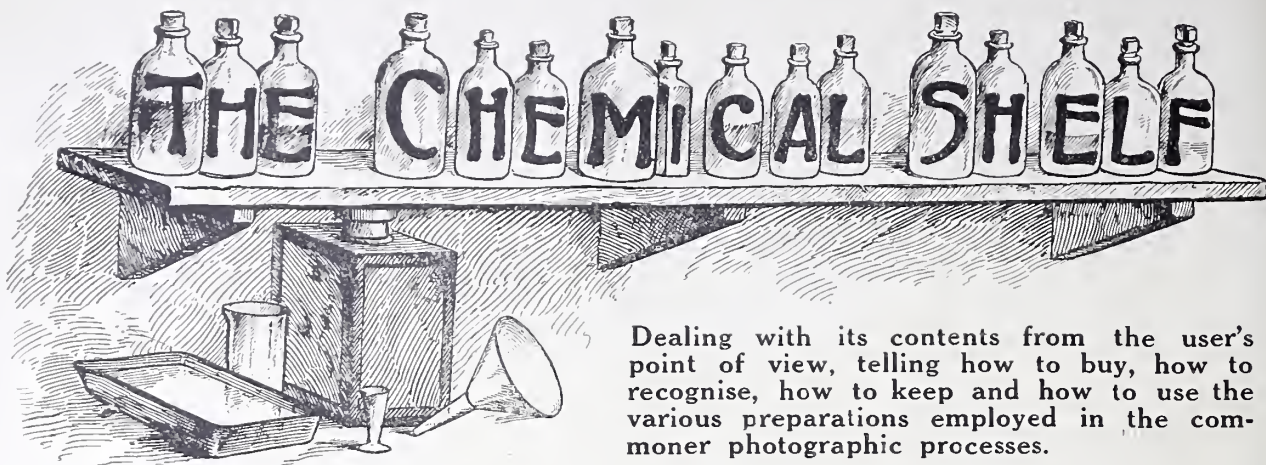
White wax	100 grains
Ether	1 ounce

Medium for Water Colours.

Instead of water, the following medium should be used when P.O.P. prints are to be tinted with water colours:

White of egg	1 ounce
Glycerine	15 minims
Ammonium carbonate	20 grains
Liquor ammonia	15 minims
Water	2 drachms

The white of egg should be well beaten up and allowed to subside, and then the ammonium carbonate, having been dissolved in the water and the glycerine and ammonia added to the solution, is well stirred in. The mixture should be strained through fine cambric or cotton wool.



IRON, OXALATES OF.

There are two oxalates of iron used in photography—ferric oxalate and ferrous oxalate—and, although both are of considerable photographic importance, they are not usually to be found on the chemical shelf of the amateur.

Ferric oxalate is a pale lemon yellow salt, which is acted upon by light, turning to ferrous oxalate on exposure. Ferric oxalate is the sensitive substance used in platinum printing, and the yellow colour of the coated side of platino-type paper is due to it.

Ferrous oxalate is a sulphur-coloured yellow powder, which is not soluble in water, but is soluble in a solution of potassium oxalate. Such a solution will act as a developer both for plates and for bromide paper, and is very free from any tendency to stain, giving a clear black image. Hence it was at one time universally employed for bromide paper prints and enlargements. In order to make sure, however, that the whole of the ferrous oxalate was washed out of the bromide paper, a weak acid bath had to be used after development and before fixing, and as acid is a very dangerous addition to hypo, this, in its turn, had to be got rid of. Hence, the advent of amidol, metol, and other non-staining developers, led to ferrous oxalate being largely superseded. But it is used to this day by some workers, so we give a formula for it.

Ferrous oxalate was very seldom kept, as such, for development, but it was formed, as required, by mixing solutions of potassium oxalate and ferrous sulphate, taking care to have the former largely in excess, so that the ferrous oxalate shall be formed in a solution of potassium oxalate, in which it can dissolve. For the same reason the ferrous sulphate solution must be added to that of the potassium oxalate, and not *vice-versâ*. If the reverse is adopted, or if enough potassium oxalate is not used, the ferrous oxalate as formed will be precipitated as a gritty mud upon the dish and paper, and it is only redissolved with difficulty.

The developer given below for plates is also an excellent blackening agent after bleaching in mercurial intensification, an application suggested by Mr. Chapman Jones. The plate after being bleached is simply well washed and then placed in the ferrous oxalate until it has darkened right through. The action is slow but uniform. Negatives intensified in this way may be re-intensified over and over again until any desired degree of contrast is obtained.

The ferrous oxalate developer is recommended as one of the most suitable for the Carbograph process, recently introduced by the Rotary Photographic Co.

FORMULA.

Ferrous Oxalate Developer for Plates and Bromide Prints.

A.—Neutral potassium oxalate	...	...	1 pound
Oxalic acid	...	...	5 grains
Hot water	...	...	48 ounces
B.—Ferrous sulphate	...	...	6 "
Water	...	...	12 "
Sulphuric acid	...	...	5 minims

For negative work, 4 ounces of A have added to them 1 ounce of B. For bromide paper, 6 ounces of A have 1 ounce

of B added. After development, plate or paper is rinsed in two changes of very dilute acetic acid (1 part of acid to 230 parts of water) for two or three minutes, washed in several changes, and then fixed.

IRON PERCHLORIDE.

Iron perchloride, known also as ferric chloride and perchloride of iron, is generally met with in the form of damp, amorphous, yellow lumps. As it is used very extensively in the arts, there are many qualities of it in the market, and that which is required for photographic purposes should therefore be purchased from a reliable chemist. It does not keep very well in the solid state, deliquescing in the air, and sticking the stopper fast in the bottle when securely enclosed. It is better therefore to keep it, when required at all, in the form of a solution.

It is extensively used in process work, but the amateur photographer does not often employ it. There is a method of reduction with perchloride (for formula, see below), and it is used for etching the plate in photogravure.

When iron perchloride is employed in photogravure it is important that it shall not be acid. To secure this, a little of the perchloride solution is separated from the rest, and strong ammonia added to it. There is at once a copious precipitate of hydrate of iron. Ammonia is added as long as the precipitate is formed. It is allowed to settle and the clear solution poured off. Water is then added, and after settling is poured off. This is done three or four times to get rid of the ammonia. The black sediment is added to the perchloride before dissolving, and should be added in such quantity that there is some of the black hydrate still undissolved at the finish. The quantity cannot be stated, as it depends on the quality of the perchloride. It is allowed to settle, and the clear solution decanted for use. The strength of solutions of perchloride is not expressed in grains per ounce, as is usual in photographic processes, but is measured by means of a little instrument known as a hydrometer, for the use of which a work on photogravure must be consulted.

FORMULÆ.

Etching Solution for Photogravure.

Iron perchloride	...	...	...	...	7 pounds
Water	...	...	...	...	5 pints

The perchloride is boiled in the water, in an enamelled iron vessel, until it has completely dissolved, as is shown by the solutions becoming clear, and any acidity is then corrected with iron hydrate, as above described. (*Denison.*)

Iron Perchloride Reducer.

Iron perchloride	...	...	...	...	10 grains
Water	...	...	...	...	1 ounce

The negative to be reduced is placed in this for a minute, is rinsed, and is then placed in an ordinary hypo bath, washed, and dried. If on coming out of the hypo it has not been sufficiently reduced, it may be washed and then put through the operation a second or even a third or fourth time.

Two new competitions start this week. The "Contents Competition" (see page 107), and a fresh "Title Competition" (rules on page x).

QUERIES AND REPLIES

REGULATIONS.—(1) Envelopes must be marked "Query," and the "Enquiry Coupon" found elsewhere must be enclosed. (2) The full name and address in addition to a *nom-de-pume* must be given. (3) Only one question on one subject is allowed in each letter. (4) Prints may be sent for criticism, but a separate coupon must be sent with each print, and a stamped addressed envelope (not loose stamps) for their return.

THE WEEK'S QUERY.

WHEN IS A FIXING BATH EXHAUSTED?

I have bought a lead lined fixing trough which holds 64 ozs. of water exactly, and have filled it with an acid fixing bath containing 16 ozs. of hypo to the 64 oz. of water, or 5 oz. to the pint. I should like to know how many quarter or half-plates I can fix in safety therein, or if it matters how long the bath is left standing, subject to the correct number of plates being fixed with it.—S.B.D. (Brook Green).

There is no definite information available as to the exact bath used by our correspondent; but MM. Lumière a year or more ago gave some figures for an acid fixer which may be quoted. A bath made up by dissolving in one pint of water forty-eight grains of chrome alum and one hundred and forty grains of sodium bisulphite, may be taken as capable of fixing fifty-two quarter-plates or their equivalent.

A pint of hypo solution, three ounces to the pint, will properly fix seventy quarter-plates, thirty-two half-plates, or seventeen whole-plates. An ordinary acid fixer will only properly fix half as many plates as a plain hypo solution of the same strength will do; but, on the other hand, an acid fixer with chrome alum as above, will fix three-fourths as many as the plain hypo. It must not be assumed that because the bath is stronger in hypo than three ounces to the pint it will fix more; the reverse is the case if anything, a strength of three ounces to the pint being better than either a stronger or a weaker solution.

To find out if a fixing bath is exhausted a drop of the solution should be put on a piece of filter or other pure paper and examined to see if the spot turns a brownish colour when it is exposed to moist air and to light for some little time. If it does the bath should at once be rejected, as it is no longer in a condition to fix a plate properly.

Such a fixing bath as that named by our correspondent would probably fix three to four dozen half-plates satisfactorily. It could no doubt be kept standing until it is exhausted by use, but the practice is not one to be recommended at any time. Hypo is so cheap, and thorough fixing is so important if permanence is desired—far more important even than thorough washing—that the solution should be renewed long before there is the slightest risk of its exhaustion. In our own practice we never, under any circumstances, keep a fixing bath from day to day, but take fresh from the stock bottle from time to time as we require it.

REPLIES IN BRIEF.

T. DICKSON (Barrhead).—The best account we know is given in "Practical Slide Making," by Harris, price 1s. nett, or post free 1s. 2d., from our publishers. It gives two chapters to collodion emulsion; but the subject of sensitising for colour is not dealt with, nor do we know of any work in print which covers the whole subject.

W. SHEPHERD ROBB (Dundee).—Thanks for your card. Your grievance is a just one, and is one which we fully share with you. If we had our way it would be removed, or rather would never have arisen. If it is removed at any time, and we hope it will be, you will know that we have got our way. In the meantime—alas.

N.F. (Dundrum).—So far as we have been able to learn, and information on the point is not at all plentiful, the development may be postponed for a month without harm, and no difference on that account need be made in the exposure. We think, with you, it is largely a matter of climate, perhaps also of conditions of storage.

D.C.M. (Muswell Hill).—We have no detailed information, but probably Dinan will suit you as well as any. Did we share your friends' views of the competition we should at once stop it; but we think that it does not bear the description they apply to it, and holding that view, we leave it to our readers to decide whether it shall go on or not.

E.R.F. (Kelvedon).—Because the lens is rather a long focus one for the camera, which, therefore, will not open out far enough to enable the flowers to be got same size. If you can arrange some sort of extension piece to fit on the front of the camera and carry the lens two or three inches further from the plate, your aim will be accomplished.

AJAX (Edenbridge).—You had better try Stevens and Co.'s dark oak stain. An ironmonger will get it for you. It gives the nearest approach to fumed oak you will get; but fuming is the only way to get the true colour. For details see "Practical Frame Making," by Col. Noverre, price 1s. nett, or post free from our publishers 1s. 2d.—There is also a book "Dyes, Stains, and Inks," price 6d., or post free 7d. from our publishers, which should prove helpful.

J. W. BOWMAN (Dover).—A special permit is required, for which application to the manager must be made.

SEWARD BRICE (Woodbridge).—We are sorry we cannot answer your enquiry; the matter is one which is dealt with by the publishers. Our own view is the same as yours. We call it a beastly practice.

INQUIRER (Consett).—Formaline (4 oz. bottle, 1s.) one part, water twenty parts. After washing, the prints are placed in this for three minutes, rinsed, and allowed to dry. They are then rewetted and squeezed.

ARNOLD F. DAUNCEY (Blackheath).—Many thanks for your kind congratulations. We, too, would like to see it altered, but understand that it is not possible. Unfortunately, these matters are outside our province.

T. W. DADD (Maidstone).—We have no information on the file with reference to the places named; but they are all full of work for the hand camera. You can hardly go astray in any of them. Many thanks for your kind congratulations.

OBITUARY (Rochester).—Your question as it stands is unanswerable, as you do not state the focus of either lens. But the f values are altered in proportion to the focal lengths. If the focus is halved by the alteration, the f numbers are halved also, f/8, for example, becomes f/4, and so on.

FACAM (Ipswich).—Measure the diameter of the full opening as carefully as you can, and measure also with equal care the opening marked f/11. Draw a straight line eleven times as long as the f/11 diameter. See how many times you can set off the larger diameter on that line. The number of times will be, approximately, the F number of the stop.

S. C. BOUNERJI (Calcutta).—The Thornton-Pickard focal-plane shutter. When we have anything further to publish on the multi-speed we shall publish it. The Stanley-Wheeler should suit you; but we would caution you against using a high power telephotographic combination at first. It would be wise to familiarise yourself thoroughly with the lower powers.

W. M. MEGIT (Cape Colony).—Your letter is to hand. We will do what we can, but please see that full particulars of what you wish done are put on the back of each. In the large number dealt with it is impossible to remember individual arrangements, and though your name is familiar we have no recollection of the circumstances to which your letter refers.

ANTIQUE (Idle).—There is no conversion of negative into a positive; the picture is still a negative one, but is taken on wet collodion and not on a dry plate, has been developed to keep the image as white as possible, and then backed up with "black positive varnish." Fallowfield, 146, Charing Cross Road, London, W.C., supplies all materials. It cannot be done by treating an ordinary dry plate negative.

ARTHUR BRUNT (Manchester).—It is not likely to be any defect of the lens, but simply that you do not use a small enough stop in it. Such a defect is present in the best lenses as much as in the worst. You would do well to get a copy of "The Hand Camera," by Wastell and Bayley, price 1s. nett, or post free from our publishers 1s. 2d., and read the part on depth of focus very carefully. Write us again if anything is not quite clear.

ELECTRIC (Sawtry).—There is, so far as we can see, no reason why the ordinary solution should not be used if that is more easily obtainable. One ounce of bichromate dissolved in twelve ounces of water should have two ounces of strong sulphuric acid added to it, a little at a time. The addition of the acid must be made very cautiously, as it causes a great heat. The solution is ready when cold. Many thanks for your good wishes.

DORMY 2 (Oxford).—The little sight should be held as close to the eye as possible, or the finder will not show all that is on the plate. The longest exposure that can be given without blurring depends on the individual, and varies from half a second to a sixteenth, or perhaps even less. A perfectly steady hand, especially if the photographer can lean against a tree, wall, or similar support, will give a couple of seconds' exposure without showing any sign of movement.

MRS. L. J. LLOYD (Haverstock Hill).—Slight underexposure is the only defect to which any exception can be taken. The negative is, on the whole, a very good one, one almost of the type to which to aim, but very good negatives of this sort are very hard to print. The printing must be timed exactly. A negative with more contrast prints easily, but will not yield a print as good as the best that can be got from the thinner one. The negative sent should yield a perfect enlargement. You could intensify it with mercury and ammonia, but we should prefer it as it is to as it would be in any "improved" form. We cannot undertake photographic work.

TOPHO (Northfield).—So far all attempts to identify the trade marks have failed.

PERCY ROBINSON (East Dulwich).—Not without permission, which is very hard to get.

J. BEGBIE, JUN. (Dundee).—Report asked for will be sent on receipt of a stamped envelope.

J. W. PASS (Leeds).—Report asked for will be sent on receipt of a stamped envelope.

VALNORD (Kew).—Report asked for will be sent on receipt of a stamped envelope. So far, however, we have no reporter at Hythe.

JONATHAN JONES (Llandyssil).—We congratulate you. We should like to have landed it ourselves. But another time please give the weight. We also fish.

MISS MORDAUNT (St. Jean de Luz).—We cannot understand the omission of the coupons, which have appeared in each issue, amongst the small advertisements. See, for example, page xxxii., May 25th, etc.

G. MEYER (Brixton Hill).—We have your letter, but cannot make out your meaning. What do you mean by "your films and paper"? We have not the good fortune to be manufacturers either of film or paper.

T. R. E. (S.W.).—Permission must be obtained. One permit from H.M. Office of Works, Westminster, covers all the Royal Parks, and one from the London County Council, Regent Street, S.W., covers all parks and open spaces under the L.C.C.

MRS. BROOKING (Wisbech).—In the absence of any more explicit definition of the phrase "local view," the subject named, if in the locality, would certainly be eligible. We can suggest no improvement on the trimming of the print sent, and certainly cannot provide a suitable title.

H. G. DOUB (Clapham).—Evidently the lens is one of those which need to be focussed with the stop that is to be used, in other words, the focus of which is altered by changing the stop. It is no great drawback that we can see—certainly some very fine lenses, indeed, have had this peculiarity. Thanks for your kind congratulations. We are sorry we cannot remedy the matter to which you refer.

RADIOGRAPH (Northampton).—If the spots are visible as clear patches before development, grease in the emulsion is the cause; but if, as is more likely, they first show in the fixing bath, they are probably due to metallic impurity of some kind, either in the plate originally, or perhaps in the water. Probably the former, as they only occur with the one make. We should be inclined to refer to the manufacturers; it does not seem that you are at fault, judging from the facts in your letter.

H. TURNER (Birmingham).—Many thanks for your note and compliments.

A. H. FRANK (Frankfurt a. M.).—The maker is E. M. Richford, of 8 and 9, Snow Hill, London, E.C.

REV. J. A. DUKE, B.A. (Birmingham).—The coupon is given each week amongst the small advertisements at the end of the paper. It was at the bottom of column 3, page xxxvii. in our issue for June 2nd.

PAX (Ramsgate).—The advanced workers' and special subject competitions are open. We do not know enough about process work to answer your enquiry. "Sinop" can be worked with an ordinary letter copying press.

GLAZING (Walthamstow).—The process by which they are glazed is known as enamelling. You will find it fully described on page 247 of the "Photographic Reference Book," price 1s. 6d. nett, or post free from our publishers 1s. 8d.

BROMIDE (Hampstead).—We know nothing of the process that is at all satisfactory, nor do we know anyone supplying the materials. Perhaps a call on Messrs. Sanger Shepherd and Co., 5 and 7, Gray's Inn Passage, Holborn, W.C., might give you some information.

CLINCHER (Madron).—The only overexposure we could detect was overexposure to the tender mercies of the postman. Nothing arrived but shattered fragments, too small for us to see what was wrong. Pack one carefully in a box and send it us, and we will gladly do what we can.

C. H. MARRIOTT (Bedford Park).—It would not be due to using the solution freshly made, which has no other effect than slightly reducing the chance of permanence. It is due in all probability to the print not being dark enough originally to give a rich colour. The use of a gold toning solution will give it a warmer not a colder colour. There is nothing for it but to make a fresh enlargement.

T. M. THOMAS (Hay).—It will be necessary to have a division inserted in the camera, extending from the dark slide nearly to the front, so as to prevent one picture from trespassing on the other. Then either a pair of lenses 3in. apart must be used, or the lens must be placed first $1\frac{1}{2}$ inches on one side of the division, and then $1\frac{1}{2}$ inches on the other, and two exposures made. Nothing more is needed.

HOLBORN ILEX (Northallerton).—Yes, any size can be copied, but only on a reduced scale, because the lens will not rack out very far. If you put a piece of ground glass where the front sheath goes, rack out the lens as far as it will go, and then gradually move the camera (starting five feet away) towards the subject; as soon as you can see it sharp, you will have the object on as large a scale as can be got with that camera and lens, unless a magnifier is used.

REVIEWS

A Paper which gives Sepia Tones by Development—Luxepia.

THE latest introduction of the Luxia Company, of South Hill Works, London, N.W., will be found to constitute a distinct departure in printing processes, being a development paper which is not intended to give black tones at all, but to yield a sepia print by development alone. The manipulation is done in the dark room, but a bright yellow light, such as would be used for lantern plates or for bromide papers, may be freely employed.

The first peculiarity to be noted is in the exposure. This must be made by a good white light; a yellow light, such as that of an ordinary gas burner or lamp, is unsuitable. Our own prints were exposed to daylight mostly, although one or two were made by means of incandescent gas, which proved to be quite satisfactory. Under a good clean negative about two seconds to bright daylight—not to direct sunshine—will be found correct; if incandescent gas is used, a minute or more at six inches distance will be required. The instructions also include magnesium, the exposure with which is two inches at one foot; but this we have not had an opportunity of testing.

The influence which the character of the illuminant employed for printing has upon the vigour and the colour of the picture is very marked, and would, we think, well repay investigation. We have not met with it to so marked an extent with any other printing medium, and it is not easy to see why there should be such an effect.

Whatever the illuminant, the exposure must be ample, if the colour is to be a good one. A curious bloom will be noticeable on the shadows of under-exposed prints, which is quite fatal to success.

The paper having been exposed, it is placed, dry, into a strongly restrained hydrokinone developer, the restrainer used

being potassium citrate. The actual composition of the developer is as follows:

Water	...	...	...	18 ounces
Potassium metabisulphite	...	...	...	25 grains
Sodium phosphate	...	...	...	450 "
Potassium citrate	...	...	...	180 "
Hydrokinone	...	...	...	50 "

This developer, which may be used over and over again so long as it does not show signs of staining the prints, causes the image to appear in about thirty seconds, development being complete in seventy seconds. The development of a Luxepia print is curious. The image is very slow in making its first appearance, and the earlier stages, even after the image has begun to show, are sluggish. As development nears completion, however, the action is much more rapid, and should be carefully watched. If anything, it should be stopped a little before the desired depth is attained, as development seems to go on slightly in the fixing bath.

Fixing is done in a solution of three ounces of hypo to the pint of water, to which five grains of potassium metabisulphite are added. The other operations do not differ from those of gaslight or bromide prints.

It will be seen that Luxepia has characteristics of its own, which separate it from the ordinary bromide and gaslight papers. There seems no reason to suppose that the prints are not as permanent as those of any developed print can be—that is to say, as permanent as can be desired. The range of tones is a wide one, and some very agreeable shades of sepia rewarded our first trials on the glossy paper. We understand that there has been some difficulty in getting a suitable paper to coat for the matt grade, but just as we go to press we learn that this has been overcome.



PICTURE BY N. B. ROBERTS, FOR WHICH A TITLE IS WANTED IN THE TITLE COMPETITION*

The conditions and coupon for the Title Competition will be found on page



FEBRUARY.

BY G. L. A. BLAIR.

Awarded the First Prize in the "Focus" Landscape Competition, Class A.

Imperial Orthochrome Plates

ARE MADE IN 3 SPEEDS

- (i.) Special Rapid
H. & D. 200.
- (ii.) Special Sensitive
H. & D. 275.
- (iii.) Non Filter
H. & D. 175.

Unequalled for Spring Landscapes.

Imperial P.O.P.

MADE IN 3 TINTS

- (i.) Mauve.
- (ii.) White.
- (iii.) Pink.

Unrivalled in brilliancy, in wealth of detail,
and delicacy of tones.

The Imperial Handbook for 1908 is now ready It gives particulars of Imperial Manufactures, and is full of photographic information useful to the Amateur.
Ask your Dealer for a Copy.

THE IMPERIAL DRY PLATE CO., Ltd., Cricklewood, London, N.W.

PLEASE MENTION "PHOTOGRAPHY" WHEN CORRESPONDING WITH ADVERTISERS.

BUSINESS NOTICES.

OFFICES.—20, Tudor Street, London, E.C. Telegrams: "Cyclist, London." Telephone: 5610 and 5611, Holborn.

PUBLISHING DATE.—PHOTOGRAPHY AND FOCUS is on sale throughout the United Kingdom every Tuesday morning.

SUBSCRIPTION.—PHOTOGRAPHY AND FOCUS will be forwarded regularly at the following rates: GREAT BRITAIN. ABROAD.

	s.	d.		s.	d.
Twelve Months ..	6	6	Twelve Months ..	10	10
Six Months	3	3	Six Months	5	5
Three Months	1	8	Three Months	2	9
Single Copy	1½		Single Copy	2½	

REMITTANCES.—Postal Orders, Cheques, etc., should be crossed and made payable to Iliffe and Sons Limited.

ADVERTISEMENTS.—All communications on advertisement matters should be addressed—The Advertisement Manager, PHOTOGRAPHY AND FOCUS, 20, Tudor Street, London, E.C. All copy for displayed advertisements for the issue of any particular week must reach Tudor Street by the first post on Monday morning in the week previous.

PREPAID ADVERTISEMENTS.

SALE AND EXCHANGE (for Amateurs only).—1d. per word, minimum 0d.

PROFESSIONAL AND TRADE.—Three words 2d., minimum 1/-.

All advertisements to be inserted on these terms must be accompanied with remittance. To ensure insertion, letters should be posted in time to reach the offices, 20, Tudor Street, E.C., not later than first post on Wednesday.

BOX NUMBERS.—For the convenience of advertisers, letters may be addressed to numbers at the office of the paper. When this is desired, 2d. will be charged for registration, and three stamped and addressed envelopes must be sent for forwarding replies. Only the number will appear in the advertisement. Replies should be addressed, "No. 000, c/o PHOTOGRAPHY AND FOCUS, 20, Tudor Street, London, E.C."

DEPOSIT SYSTEM.—Persons who hesitate to send money to unknown persons may deal in perfect safety by availing themselves of our Deposit System. If the money be deposited with PHOTOGRAPHY AND FOCUS both parties are advised of this receipt, and upon intimation of the arrival and acceptance of the goods, the money is forwarded, less a charge of 1/- for registration. The time allowed for a decision after receipt of the goods is three days. For all transactions exceeding £10 in value, a deposit fee of 2s. 6d. is charged. Cheques and money orders should be made payable to the Proprietors, Messrs. Iliffe & Sons Limited, and addressed to them at Coventry.

PUBLISHING NOTICE.—Communications for the Publishers should be addressed, Iliffe & Sons Limited, 20, Tudor Street, London, E.C.

EDITORIAL NOTICES.

ADDRESS.—All communications for the Editor should be addressed: The Editor, PHOTOGRAPHY AND FOCUS, 20, Tudor Street, London, E.C.

TO CONTRIBUTORS.—The Editor will be glad to consider original up-to-date manuscripts on photographic subjects. All contributions must be typewritten, or in very legible handwriting, on one side of the paper only, and should bear the name and address of the sender. Letters or communications arising out of matters already appearing in the paper are not paid for. The Editor disclaims legal responsibility for the safety of matter submitted to him, but he will endeavour to return rejected manuscripts, etc., when a stamped addressed envelope is enclosed for that purpose. No notice whatever can be paid to communications without the name and address of the sender, not necessarily for publication.

PRINTS FOR CRITICISM.—Readers sending prints for criticism or advice are notified that in all cases it is understood that by so doing permission is given for their reproduction, without fee, in PHOTOGRAPHY AND FOCUS.

PRINTS FOR REPRODUCTION.—Reproduction fees are only paid by arrangement beforehand. The sending of a print, without any condition stated, will be taken as permission to reproduce it without fee. The Editor will be glad to consider for publication, with or without letterpress, photographs of special interest, on terms to be arranged.

PAYMENTS.—Articles and illustrations are paid for on acceptance.

INTERVIEW.—The Editor will be at 20, Tudor Street, on Wednesdays, between the hours of 9.30 and 11.30 a.m., but can only be seen at other times by appointment.



THE AUTOCHROME LECTURE AND SLIDES, by Mr. R. Child Bayley, during the past season have been to sixty-three societies. They are now circulating amongst the German photographic societies, but will be back in this country again by the end of November, when they will be available for loan.

THE ROYAL PHOTOGRAPHIC SOCIETY'S EXHIBITION. The prospectus is now ready, and can be obtained on application to the secretary, 66, Russell Square, London, W.C. The exhibition will be open from Thursday, September 17th, to Saturday, October 24th, in the New Gallery, Regent Street. It will be divided into four sections: (1.) Pictorial photographs. (2.) Scientific and technical photography, and its application to processes of reproduction. Apparatus for scientific photography. (2a.) Screen plate colour transparencies. (3.) Professional and commercial photography. (4.) Photographic apparatus and material. There will be no charge for exhibiting in Sections 1, 2, and 2a.

Books for . . . Photographers. .

Science and Practice of Photography.

By CHAPMAN JONES, F.I.C., F.C.A., F.R.P.S.
Price 5/- nett. Post free 5/4.

Instruction in Photography.

By SIR WILLIAM ABNEY, K.C.B.
Price 7/6 nett. Post free 7/10.

Practical Orthochromatic Photography.

By ARTHUR PAYNE, F.C.S.
Price 1/- nett. Post free 1/2.

Successful Negative Making.

(Illustrated.) By T. THORNE BAKER, F.C.S., F.R.P.S.
Price 6d. nett. Post free 7d.

All About Enlarging.

(Illustrated.) By C. WINTHORPE SOMERVILLE, F.R.P.S.
Price 6d. nett. Post free 7d.

Photography Made Easy.

(Illustrated.) By QUI-VIVE.
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Lantern-slide Making and Exhibiting.

(Illustrated.) By JOHN A. HODGES, F.R.P.S.
Price 6d. nett. Post free 7d.

Pictorial Landscape Photography.

(Illustrated.) By J. C. WARBURG.
Price 6d. nett. Post free 7d.

A full list sent on receipt of a postcard.

ILIPFE & SONS LTD.,
20, TUDOR ST., LONDON, E.C.

OTLEY is the scene of the annual excursion of the Yorkshire Photographic Union, which takes place on Saturday, June 20th. Tea will be served in the Recreation Hall at 6 p.m.

STANDA, LTD., makers of the Standa daylight developing tank, are at 3, Cherry Tree Court, Aldersgate, London, E.C., and announce that a series of demonstrations of the Standa will be given there during the season.

LANTERN LECTURES. Mr. L. Hill Bailey, of 21, Gleebe Road, Chelsea, writes us that he has two lantern lectures he will be willing to deliver to any small photographic societies without charge beyond travelling expenses.

DUST IN DARK SLIDES. During a journey plates should not be carried in wooden dark slides unless it is absolutely necessary. The vibration causes the sharp edges of the glass to wear fine dust off the woodwork, and this, settling on the plates, is a fruitful cause of fine transparent spots.

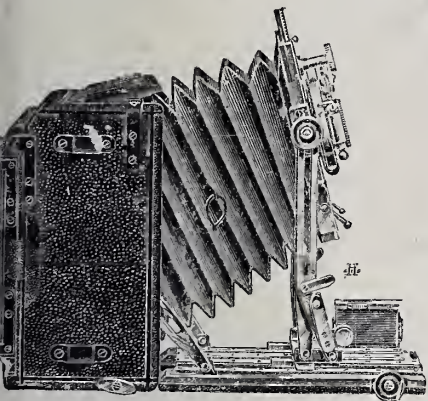
CANEWDON, overlooking the plain of Ashington, the scene of one of Canute's battles, was visited by the Southend-on-Sea society on the 30th ult. The church is a very ancient one, and ancient also are some of the villagers, one at least claiming to be 104 years of age.

CRICKHOWELL, which is called "the Garden of Wales," would seem to be an ideal spot for the amateur photographer, to judge from a little guide, which can be obtained, price 2d., from W. Howells, Victoria House, Crickhowell. The place is on a motor bus route between Brecon and Abergavenny.

AN ALBUM OF BRIDGES. The "Westminster Gazette" mentions as an excellent illustration of specialisation in photography, an album of prints which an amateur compiled, depicting the whole of the Thames bridges, from the source to the mouth. Some of the prints, as may be supposed, did not make very good pictures, but others were quite of the other description, and the set, with some very informative particulars relating to the construction and the history of the bridges, was sufficient to engage anybody's interest.

AUTOCHROME PHOTOGRAPHY. Messrs. Jonathan Fallowfield, of 146, Charing Cross Road, London, W., write us that they are making a speciality of Autochrome work, and undertake both the practical work of developing and mounting, and also the actual taking of pictures or articles. For developing, spotting, and mounting in an Autotrans frame the charge is 4s. for a quarter-plate, or for supplying the finished Autochrome of any desired subject 5s. 6d. Other sizes at prices in proportion. Messrs. Fallowfield also supply a small booklet on the process, price 3d. post free.

The "SANDERSON" Hand Camera and what it will do.



Each "Sanderson" Hand Camera is fitted with a Universal Rising and Swing Front for difficult subjects that may be encountered when photographing.

The Swing Front is here shown in use with the camera, otherwise, in its normal position at the infinity mark. The two small bolts with the bullet ends, shown on the camera front just below the lens, control this movement. By simply withdrawing them, the camera front is permitted to swing to any degree on its central pivots, and is secured in any required position by the milled nuts.

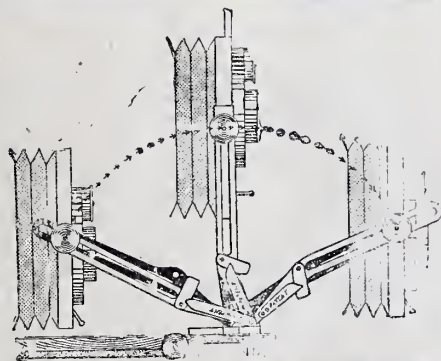
These locking bolts used in conjunction with the slotted struts form an important feature of the "Sanderson" patent. A lens that can be swung but not locked at any required point is useless. By means of this Swing Front you can get pictures of high buildings from the ground level to the weather vane.

Why do not other cameras have this "Sanderson" Universal Front if it is such a great advantage?

Doubtless, owners of other cameras would like to have the advantages of the "Sanderson" movements, but the invention was such an important one that it was strictly patented, and its advantages are obtained by users of "Sanderson" cameras only.

This diagram shows a portion of the Universal Swing movement and the locking action. It shows the camera front in three different upright positions. The slotted struts swing from a common centre. It is, of course, obvious that the front can be stopped at any point on the arc shown by the arrow heads, and at the same time can be raised or lowered in any position within the arc.

You cannot do this with your ordinary camera. You can do it with a Sanderson."



In this little space we cannot tell you much about the "Sanderson," but if you will send us a postcard, we will post you a 70 page fully illustrated book entirely devoted to this wonderful camera.

The "Sanderson" movements are all patented, and cannot be applied to any other camera. Cameras may be made to "look" like the "Sanderson," but they do not possess any of the features that have made the "Sanderson" famous.

HOUGHTONS LTD

MANUFACTURERS OF CAMERAS,

88/89, HIGH HOLBORN, LONDON, W.C.

Every Photographic Dealer of importance can show you a "Sanderson" Camera. Say you have seen the "Sanderson" advertised and would like to examine one.

PLEASE MENTION "PHOTOGRAPHY" WHEN CORRESPONDING WITH ADVERTISERS.

MESSRS. RAJAR, LTD., ask us to announce that for the convenience of their customers in London and the suburbs they have opened a stockroom at 8a, Red Lion Square, London, W.C.

X X X X

MR. GEORGE DAVISON advises us that his address in future will be "The Log Cabin" Houseboat, White House, Ship-lake, Oxon.

X X X X

THE WELLINGTON FIRM is dealt with in an interesting article by Mr. Leonard Henslowe in the "Daily Mail" of the 2nd inst. The article, which takes the form of an interview with Mr. H. W. Hall, the managing partner of Messrs. Wellington and Ward is entitled "Representative British Industries, a Romance of Success."

IPSWICH CAMERA CLUB. The hon. secretary, Mr. T. A. F. Crisp, having resigned, Mr. R. Dixey, of Waterloo House, and Mr. S. Haggard, of 111, London Road, Ipswich, are now acting as joint honorary secretaries.

X X X X

A CRICKET MATCH between the staff teams of Messrs. Houghton's, Ltd., and Messrs. W. Butcher and Sons, Ltd., came off on May 23rd at Messrs. Butchers' ground at Highams Park, and resulted in a victory for the Ensign team (Houghton's) by thirty-six runs.

X X X X

CAMERAS, LTD., of 84, Cross Street, Manchester, has issued a fully illustrated price list of photographic goods, cameras, lenses, and sundries, which should prove a very useful book of reference to amateurs in the district.

A LIST OF SECOND-HAND CAMERAS and lenses is just to hand from the West End depot of the City Sale and Exchange, 26 and 28, King's Road, Sloane Square, London, W., one minute's walk from Sloane Square Station. The list gives details of over 500 separate items, most at greatly reduced prices.

X X X X

ACCURACY IN PER CENT. SOLUTIONS. A good many photographers worry themselves needlessly over the composition of a ten per cent. solution. It is safe to say that if an ounce, as bought, of any photographic chemical, is dissolved in water to make ten fluid ounces of solution, that solution will be near enough to the true ideal ten per cent. solution, as to make no difference whatever in practical work. Anything more than this is needless refinement.



WATCHING DEVELOPMENT WITH AUTO-CHROME PLATES.



AN important paper has just been published by the Brothers Lumière and M. Seyewetz, on the subject of the control of the development of Autochrome plates, in order to remedy as far as possible errors in exposure. They point out that the colour sensitiveness of the plates is very materially reduced as soon as they are wetted with water or developer, so that a moderate degree of red or green light may be used with impunity. The dark room light which they recommend is that obtained by filtering the light of a candle, paraffin lamp, or incandescent electric bulb through a screen made by combining a glass coated with gelatine and stained with a very non-actinic yellow, such as tartrazine, with one stained with methyl-violet. This gives a red light. If a green is preferred, the tartrazine should be combined with malachite green. Tissue paper may be dyed in this way and used, employing one piece stained yellow, with two or three of the green, according to the intensity of the source of illumination.

The pyro-ammonia formula first put forward for Autochrome work discolours so rapidly that the appearance of the image cannot easily be followed; but this difficulty can be overcome by the addition of a little sodium sulphite. Five grains of the anhydrous (or ten grains of the ordinary crystalline) sodium sulphite to the ounce of developer will prevent its discoloration during use. The addition of sulphite slightly increases the time of development.

The developer recommended for the plates takes the following form:

AA.			
Water	100 cc	or	3½ ounces
Liquid sodium bisulphite (commercial)	2 drops	„	2 drops
Pyrogallol acid	3 grammes	„	46 grains
Potassium bromide	3 grammes	„	46 grains
BB.			
Water	85 cc.	or	2 ounces 7 drams
Anhydrous sodium sulphite	10 grammes	„	154 grains
Ammonia .920 (22° Baumé)	15 cc.	„	4 drams 12 minims

It is known that with the same developer used at the same temperature the time the image takes to appear is governed by the exposure. In order, therefore, to obtain for variations of exposure sufficiently marked differences in the time of appearance of the image to act as a guide, development is begun by using a solution which contains only one-fourth the normal quantity of ammonia.

The following then becomes the procedure. Solution BB is diluted to quarter strength for use. Into the dish we pour—

Water	4 ounces
Solution AA (as above)	½ ounce
Solution BB diluted to quarter strength	½ ounce

The temperature should be 60° Fahr. In a measure a couple of ounces of the diluted BB solution are kept ready to be added, wholly or in part, as may seem necessary. The plate should be put into the dish quite away from the light, and kept covered for at least twenty seconds, counting the number of seconds from immersion until the first outlines of the subject (disregarding the sky, if a landscape) can be distinguished. However much the over-exposure, the first outlines do not show for at least twenty-two seconds, so that there is no need to bring the plate near the light under twenty seconds at least. As soon as the image has appeared, such quantity of the reserve BB solution as is needed may be added, as indicated in the table below, and the plate kept again in shadow until development is finished.

The authors, in the paper of which this is an abstract, state that the method has given them excellent results, particularly with over-exposure. "With much over-exposed plates we were able to obtain results as good as with normal exposure."

TEMPERATURE 60° F.

Time of appearance of first outlines of image, disregarding sky.	Quantity of solution BB diluted to ¼ to add after first appearance of image.	Total duration of development, including time of appearance of image
Seconds.		M. S.
22 to 24	Nil	2 0
25 „ 27	33 minims	2 15
28 „ 30	135 minims	2 30
31 „ 35	½ ounce	2 30
36 „ 41	5 drams	2 30
42 „ 48	7 drams	2 30
49 „ 55	1 ounce	2 45
56 „ 64	10 drams	3 0
65 „ 75	11 drams	4 0
Above 75	13 drams	5 0

'CRITERION'

PRIZE

COMPETITION.

**OVER FIFTY
CASH PRIZES**

**for the best
prints on
"Criterion"
Paper or
Postcards.**

First Prize,
£2 2s. 0d.

Second Prize,
£1 1s. 0d.

Third Prize,
10s. 6d.

**and
50 other prizes of
2s. 6d. in cash or
'Criterion' Goods
as preferred.**

In this Competition all amateur photographers stand an equal chance, as no picture which has won a prize in any competition must be submitted.

No coupon is required, but all prints must be made on one or more of the "Criterion" celebrated papers or postcards which can be purchased in 6d. packets from any high-class dealer. The brands to be obtained are

"CRITERION" { **P.O.P.**
ESTONA (Self-Toning)
CELERIO (Fas Light)
BROMIDE.

CLOSING DATE JUNE 30th.

• • RULES. • •

1. Each entry must be on "CRITERION" Paper or Postcards, any size, grade, or surface, mounted or unmounted.
2. Any number may be submitted, but the outside label from a packet must be sent with each set of 6 or less sent in.
3. The cards *must* be purchased from a dealer, whose name must be given. If your dealer does not stock—send us a p.c. with his name and address, stating your requirements, and we will forward to him by return of post.
4. Entries must be sent in on or before 30th June marked "Competition P," to the Birmingham Photographic Company, Ltd., Stechford, Birmingham.
5. No entry forms are required.
6. Entries will be returned as soon as possible if stamped and addressed wrapper is enclosed (not loose stamps), but responsibility cannot be accepted if any are accidentally lost or mislaid.
7. The Company's decision must be accepted as final.
8. No picture which has previously won a prize in any competition must be submitted.

The Birmingham PHOTOGRAPHIC COMPANY, LTD., Stechford, near Birmingham.

Title Competition Result.

"THE FURTIVE LOOK" SECURES THE FIRST PRIZE OF £3 7s. 1d.

THIS particular picture seems to have been found more difficult than its predecessors—possibly because the most obvious title of all, "The Poacher," was forestalled. Still, a great many entries have been received, and the task of weighing up their relative merits has been no light one. The total amount available for distribution is £10 rs. 3d., which has been divided in accordance with the rules into a first prize of £3 7s. 1d., and six other prizes, each of £1 2s. 4d.

First Prize, £3 7s. 1d.

E. A. Spivey, The Grove, Colne, Lancs. "The Furtive Look."

Six Prizes, each of £1 2s. 4d.

Percy A. H. Milan, 61, North Street, Stamford, Lincs. "With furtive glance . . . pursues his way."

Miss Agnes L. Shields, 120, Bensham Manor Road, Thornton Heath, Surrey. "Mischief Afoot."

P. H. Bishop, 88, West Street, Sittingbourne, and Douglas Cousin, 121, Victoria Road, Swindon, Wilts. "Ways that are Dark."

Hon. A. W. Erskine, Bowscar, Penrith, and Stanley W. Green, Haddon Lodge, Rutland Road, Harrogate. "Up to no Good."

A Novel Competition.

WHICH ARE THE SIX BEST FEATURES OF "PHOTOGRAPHY AND FOCUS." No Entrance Fee. Coupon on page x.

EVERY reader of a journal at some time or another feels as if he would like to express his opinion about it to those who control it. Some parts appeal to one more than another; what is one man's meat may be another's poison; as many opinions as men, as the old proverbs had it. Here, then, is the opportunity for the readers of *Photography and Focus* to say their say on the different features of the paper.

In addition to the articles and to the illustrations, the attractiveness of which must depend on the nature of each particular article or illustration, the features of *Photography and Focus* may be said to be fourteen in number. They are:

1. "The Chemical Shelf."
2. The Competitions.
3. "Correspondence" (not questions and replies).
4. "Critical Causerie."
5. "Formulæ."
6. "Holiday Information."
7. "News from all Sources" and "Snap-shots."
8. "Piffle."
9. "Practical Paragraphs."
10. "Queries and Replies."
11. Reviews.
12. The Weekly Rhyme.
13. "Spirit of the Times" and "Editorial."
14. "The Week's Meetings" and "Forthcoming Events."

A coupon will be found on page x. this week, which is to be filled up by each competitor with the six of these features which he thinks most popular, in order of popularity. He has then only to write his name and address at the foot of the coupon and send it to The Editor of *Photography and Focus*, Contents Competition, 20, Tudor Street, London, E.C., to reach there not later than by the first post on Tuesday, June 16th.

Prizes.

The first prize, to the sender of the list most nearly in agreement with the views of the majority, as expressed in the competition, a signed copy of "The Complete Photographer," the half-guinea work by Mr. Child Bayley.

Second prize, a free subscription to *Photography* for twelve months.

Advanced Workers' Competition.

Awards for May.

THE numbers in this section of our monthly competitions are about the same as usual; if any, slightly more than last month were sent in, but on the whole we are inclined to think that the average of quality is not quite as good. Certainly, the regular competitors, to whose work month in month out we look to maintain a high standard, are not quite at their best this time. The criticism is well in hand, and we hope to get all the prints off by the end of this month, where stamped labels or wrappers were sent for their return.

First prize, *Photography* silver plaque, Mr. Thomas Stevenson, Woburn Place Gardens, Addlestone, for a print entitled "Our Dickie."

Second prize, *Photography* bronze plaque, Major Frank Young, Stillyans, Horeham Road, Sussex, for a print entitled "Sunlight and Marble."

Third prize, *Photography* bronze medal, Mr. and Mrs. Alfred Bracewell, 20, Heaton Grove, Frizinghall, Bradford, for a print entitled "The Village Fiddler."

Certificates have also been awarded to Mr. H. T. Winterhalter, of Montague Street, Kettering, for "Sunlight in the Minstrel Gallery," and to Mr. Easten Lee, 85, Osborne Avenue, Newcastle, for "A City Gateway."

The Beginners' Competition.

Awards for May.

THERE is a very distinct improvement to be noted again this month in the average quality of the prints sent into the beginners' competition, and to judge from the size of the pile the number of entries is a little larger. Some of the best of the prints were of quite exceptional quality, and serve to show that the senders may well hope to succeed in the advanced workers' division.

The first prize, a signed copy of "The Complete Photographer," has been won by Mr. H. Smith, of 130, Byron Road, Small Heath, Birmingham, for a print entitled "Sunlight and Shadow."

The second prize, a free subscription to *Photography and Focus* for twelve months, has been won by Miss Ethel W. Amblar, Oak Well, Bradford, Yorks, for a print entitled "Veronique."

Certificates have been awarded to Mr. E. O. C. Pugh, Shire Oak Hill, Walsall Wood, Walsall, for "A Rainy Sunday at the Bank"; to Mr. B. Wallace, of 113, St. James Road, Upper Tooting, London, S.W., for "A Welsh Beauty"; to Mr. J. Wallace Anderson, of 62, Janet Street, Liverpool, for "The Dock"; and to Miss Audrey Mitchell, of 40, Broadwater Down, Tunbridge Wells, for "Day Dreams."



What Photographers Say.



"I should like to add that since trying your plates at the beginning of last year, I have been a regular user of them, and have never handled plates easier to work, or giving such uniformly good results. Their keeping qualities also appear to be excellent."

"I may say that I have used nothing but Gem Salon plates for the last two years, mostly for focal plane work, and have found them all that could be desired for both focal plane and ordinary shutter work; they have a very fine grain and great latitude of exposure; in fact, in my opinion, they are the plate *par excellence* for all kinds of work."

"I may here note I have tried most of the various brands and makes of plates, but none have been so satisfactory in my hands as your Salon."

"I have been using your Salon plates for high-speed work ever since their appearance on the market, and they have always given the greatest satisfaction. Previous to their introduction I had tried nearly all the brands of very fast plates, but could never get one to please me until the arrival of the Salon, which is beyond dispute the fastest plate made."

"I may say that I have used every brand of your plates, and they have given me beautiful crisp negatives. The great feature about them in my hands has been the clean, bright working quality, giving negatives, with ordinary care, remarkably free from fog. I have tried them on almost every class of work—Snap Shots, Portraits, Landscapes, Interiors, etc., and have never found them to fail."

(The originals of the above testimonials may be seen.)

"SALON"

THE
FOCAL
PLANE
PLATE.

400 H. & D.

POPULAR PRICE—

Quarter-plate - 1/- doz.

Half-plate - - 2/3 doz.

RELIABLE.

BUY
FROM
YOUR
DEALER.

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THE PLATE
FOR THE
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CAMERIST.

270 H. & D.

POPULAR PRICE.

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RELIABLE.

The 'GEM' Coupon Scheme

Every packet of Gem Plates has a coupon attached. Twelve of these coupons entitle the sender to 1s. worth of Gem materials—plates, papers, postcards, or a 2in. iso screen. Coupons are available until further notice.

"SALON" and "METEOR" Plates
are manufactured only by

THE GEM DRY PLATE CO. LTD.

at their factory,
CRICKLEWOOD,
LONDON, N.W.



"The time has come, the Walrus said, to talk of many things."

NOW that photographic exhibitions are mercifully at an end for a few happy weeks there are appearing in various papers the usual growls about the wily ways of the pot-hunter—the pursuer of medals. During the past season he has been at his usual tricks, and he will play the same old game next season, and every season after, until such time as organisers of exhibitions adopt one of the many simple and commonsense methods of clipping his greedy claws.

* * *

The matter works out somewhat as follows: Tom Jones, by some unforeseen accident, secures a good subject. We can't blame him for that. He didn't mean to do it. It is the sort of thing that may happen even to the most careful and gifted worker. From his negative Tom may make some prints himself, although the probability is that he will hand his lucky bit of glass to a firm of doers-of-the-rest-at-lowest-terms and order half a dozen framed enlargements in top-notch style. He has no qualms of conscience when, later on, he signs declarations that the work is entirely his, as he argues that without his negative the prints could not have existed, and therefore their existence is entirely due to him. Some people have got consciences that will stretch from here to Kamschatka without springing a leak.

* * *

Tom then proceeds systematically to plug his prints into every exhibition held. He spares none. He has called his picture "The Pensive Pump," and wheresoever there is an exhibition there will that pump be seen. The only shows where its absence may be hoped for are those where prints are admitted on their merits, and not as a matter of right secured by payment of a shilling, or even sixpence. If a village tin chapel holds a bazaar and ventures on a photographic class open to anyone at sixpence a frame, with a first and only prize of a half-crown medal, bang goes that medal up the spout of that pump. Not only so, but if the bazaar should happen to be repeated the following year the pump is again found pensively at its post, and bang goes another medal.

* * *

One secretary actually wrote to Tom Jones and reminded him that they had had his Pensive Pump annually for about six years, and had he got anything else in stock. He replied that there was no rule in the prospectus against sending in the same print for fifty years, and that they must have the pump whether they liked it or not. So they had it. And the pump pensively swallowed another medal.

* * *

The only thing that finally dries up the pump is the fact that at last Bill Smith meets with an accident. He also gets a good negative. His fine rendering of "The Frolicsome Flatiron" scoops in the plaques and medals of two whole seasons, and would last even a third, only Jack Robinson's grand print of "The Haunted Hatbox" burst upon an astonished world, and Tom Jones and Bill Smith are heard of no more.

* * *

It is a wretched state of affairs. I have before pointed out a simple remedy, and I repeat it. Once a print has received a pot, put it in the Potted Pictures Class from that day forth. Put it on the fire if you have the chance, but anyhow clear it out of the way. If a man only produces one good picture he only deserves one medal, and probably not that.

* * *

I shall keep a watchful eye on exhibition prospectuses next year, and unless I find a clause barring from the open classes all prints which have previously received an award I shall lay myself out to say something very savage indeed.

And now for a few practical hints on portraiture. They are not my own. Thank goodness. Long ago I gave some pretty complete instructions for dealing effectively with some of the facial troubles encountered by the portraitist. For example, in the case of a sitter with a swivel eye, I suggested it might be slewed round by inserting a fish hook attached to a piece of catgut glued to the near side ear. I am well aware that such drastic measures are often foolishly resented by the sitters, but my theory is that never on any account should a sitter's feelings or opinions be considered for a moment. His subservience should be secured by means of chloroform, or a club, if necessary. The hints I have just been reading are of a particularly mild nature, and merely involve a particular lighting, position, and view point.

* * *

Take, for instance, the case of a sitter with a pug nose. The instructions are, "Camera above head, front face (or nearly); head bent." There would, of course, be no necessity to address the sitter as "puggy." I must say that it looks to me like a tough job to put the camera above the patient's head and get a front view of his pug while his head is bent down. Why not hang a weight on his nose?

* * *

Here is another common difficulty fully tackled. "Large ugly ears; threequarter face, Rembrandt lighting." But what monotony there would be. We can't all be taken three-quarter face with Rembrandt lighting. It would be far simpler to remove the ears and replace them with an artificial pair, for the loan of which a small charge could be made. The large ugly ears should be replaced afterwards, taking care to put each one on its proper side, and right way up where it was possible to distinguish the right way.

* * *

A difficulty here presents itself. What should be done in the case of a sitter with a pug nose and large ugly ears as well? You can't take him two ways at once, and the very Rembrandt lighting, so good for ugly ears, might be disastrous for a pug nose.

* * *

The following remedy might also prove worse than the disease: "Long neck; camera above head, bent head, raise neck-wear." All very well, but some people don't like having a collar mauled about, that very likely was put on clean only a week or so ago. And you would look very funny if you took a double-handed grab at a chap's neck-wear and found at the very first pull that you had lugged his shirt up by the roots. Besides, ladies have long necks sometimes, and if — Hang it all; why not leave neck-wear alone, and let the giraffes show their necks? It isn't your fault.

* * *

As to short necks, they can easily be lengthened. The only trouble likely to arise is when the trap-door won't work.

THE WALRUS.

SUBSCRIPTIONS.

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PHOTOGRAPHY. JUNE 16TH, 1908.

PHOTOGRAPHY

A JOURNAL FOR EVERY CAMERA USER.

EDITED BY R. CHILD BAYLEY.

PUBLISHED WEEKLY.

JUNE 16TH, 1908. TUESDAY. No. 1,023. Vol. XXVI.

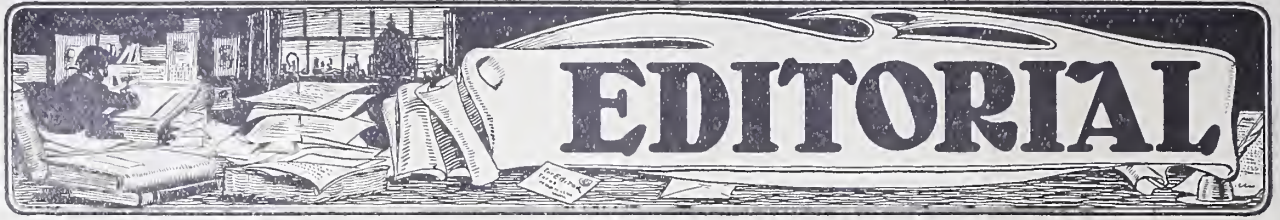


An African Landscape

AN AFRICAN LANDSCAPE.

Awarded a Prize in the "Focus" Landscape Competition.

BY A. J. TAYLOR, CAPE TOWN.



Guesswork.

The photographer who has mastered the elements of his process knows that on many points the minute accuracy laid down in the instructions is not a necessity, and that for a good deal of weighing and measuring he may substitute guesswork. But then he knows full well that in certain other cases this guesswork would be fatal to success, and that in those accuracy is all-important. The beginner has not yet learnt to distinguish between the two, and therefore if he would avoid disappointment and photographic disaster, he will do well never to substitute guesswork for measurement or weighing. Let him ascertain his exposures with a meter, time his development, and weigh his chemicals, and he will be profiting at once by the experience of those who have gone before him. As used to be printed on the plate boxes of a certain well-known firm, for the beginner, "Guesswork will not do."

The Use of a Burning Glass.

Now that the sun is occasionally visible we may perhaps be excused for reminding our readers of a little dodge in printing which may at times prove very serviceable with negatives that are a little too hard in places. The dodge is an old one, but none the worse for that, and the mere title of our paragraph must almost have been sufficient to convey it.

A negative is being printed, let us suppose, in which there is some part which is a little too dense, while all the rest is of about the right strength. After printing in the shade in the usual way until very nearly the right depth has been reached in the parts which are correct, we take an ordinary reading glass, or, failing that, a magnifying glass of any description—a photographic lens will do at a pinch—and, holding the printing frame in sunlight, we concentrate the light with the help of the glass on those parts of the negative which are too dense. The action with a large lens like that of a reading glass is very rapid, and the spot of light must be kept moving, or it will show as a dark patch on the print. Moreover, the glass must not be held so that the sun's rays come quite to a focus on the negative, or the heat may injure it. A little discretion must be used. The method is very simple, and one that anyone can use; but it is nevertheless very effective.

Sand in Printing.

Another printing device which we have seen used recently is not novel, but is perhaps worth mention. It is the employment of silver sand for shading parts of a negative during printing. It will be found a very convenient way of protecting the centre of the negative when we want the edges to be printed out more deeply. The printing frame is placed horizontally, and the sand is heaped with a teaspoon on those parts which are to be held back. The edges of the heap are thinned out, and so anything like a harsh line is prevented. Printing is, of course, done in a diffused light, and as every time the print has to be looked at the sand has to be removed, this in itself,

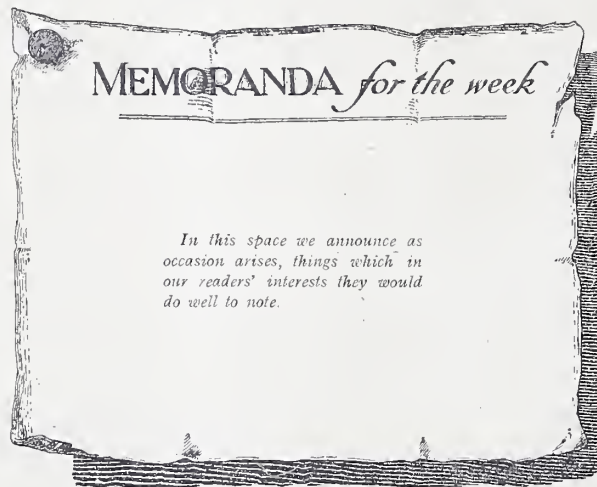
which is no great trouble, is an additional guarantee against any harsh line, as it is certain not to be put down again in exactly the same place. The sand may be moved about during printing.

Unintensifying Intensified Negatives.

It may happen at times that after intensifying a negative with mercury further consideration leads us to wish to undo the work so done. It is not possible to do this without a certain loss of some of the density the negative possessed before intensification, but the loss is not very great. The mercurially intensified negative should be soaked for a few minutes in distilled water, and should then be placed in a weak solution of potassium cyanide (ten grains to the ounce is a convenient strength). This solution must also be made up with distilled water. In this it is left until the removal of the result of intensification is seen to be complete, after which it is rinsed two or three times in distilled water, and the washing finished with ordinary water. The use of distilled water where stated is a condition of success. We ought to remind those who think of trying this method that potassium cyanide is an extremely poisonous salt.

Toning Failures.

Where lies the difficulty in toning P.O.P.? the practical photographer may well ask. He does his toning from time to time, and finds his baths and processes work with the regularity of the solar system itself. Yet week in, week out, we get a constant supply of toning failures upon which we are asked to pronounce. The task is not always an easy one, or rather it is almost invariably difficult: but a summary



of the commonest causes of trouble may perhaps serve to make it easier in future. For one thing, we believe the commonest fault of all is the attempt to use the toning solution more than once. It should be freshly mixed in the proportions required by the number of prints to be toned, used, and thrown away. Two grains of gold chloride to one shillingsworth of P.O.P. is a safe guide. The use of a dish for toning that is contaminated with hypo is another source of trouble. In bygone times we used to be told that the hypo should not even be got out until the toning was over, so as to remove all possible risk of it getting into the bath. And the advice, if old, is at least very sound. When we remember that we have only a grain or so of gold chloride in the bath, it is clear that very little hypo is needed to do a great deal of harm.

Insufficient washing before toning is responsible for its share of spoiled prints, and insufficient washing is more often due to slackness than to scarcity of water. If the instructions say "wash in three or four changes of water," it is certainly not sufficient to put the prints into a dish, and to let them lie in a mass together while the water is poured off and fresh put on. Two dishes should be used, and the prints picked up singly, drained, and then placed in the other dish. In the same way toning will never be even if they are not kept moving. In fact, the best plan is to divide the toning bath into as many portions as there are prints, and to tone each print in a separate lot of solution. This is almost, if not quite, as quick as toning them all together, and is certainly more uniform in the tones that result. Our last cause of defective toning is cheap and inferior gold chloride. In the case of so costly a salt as gold chloride it is the poorest economy to purchase a cheap brand of unknown make, and therefore quite without a guarantee of quality.

"LUCKY JIM."

You know old Jimmy Messiter? We call him lucky Jim,
Because Misfortune's marked him down, and makes a butt of him.
He recently got landed in an ocean of expense
Through a second-hand reflector with a four-point-nothing lens.

He went and bought this camera, which ran to twenty "quid,"
And to drop it from a window was the first thing Jimmy did.
He had the damage rectified, which cost a five pound note,
And then he lost it overboard, whilst working from a boat.

He got a man, at great expense, to fish it up for him,
Who pretty nearly drowned himself, and charged it up to Jim.
And when that blessed camera was got to rights again
He dropped it from the window of a Great North-Southern train.

In half as many seconds as it's taken me to tell,
Old Messiter was pulling the communication bell.
He stopped the train, he searched the track, when, to his glad surprise,
An engine smashed the camera before his very eyes.

He tried for compensation, and a pretty bit it cost,
For the case was plainly hopeless, and, of course, old Jimmy lost.
And his mental equilibrium's given way beneath the strain—
For they made him pay a five-pound fine for pulling up that train!

THE WEEK'S MEETINGS.

MONDAY, JUNE 15TH.

Attercliffe P.S. "Toning of P.O.P." A. Grove.
Bowes Park & D.P.S. "Landscape Composition." H. Mummary.
Southampton C.C. "Tabloid Photography." S. G. Kimber.
Wallasey A.P.S. "Photographic Apparatus: Its Use and Abuse." W. Hayes
Walthamstow P.S. Portfolio Night and Rummage Sale.
Bradford P.S. Esholt.

TUESDAY, JUNE 16TH

Royal P.S. "The Artistic Impulse" Horace Mummary.
Batley & D.P.S. Hnlmfrith.
Aberdeen P.A.C. Midmar.
Hackney P.S. "Various Methods of Developing Plates."
Darlington C.C. Stereoscopic Slides. Mr. Borrow.

WEDNESDAY, JUNE 17TH.

Lincoln A.P.S. Belvoir Castle.
Everton C.C. Print Criticisms.
Bilham C.C. Question Night.
Leeds C.C. "Figure Studies" A. Cohen.
Darlington C.C. Yarm.

THURSDAY, JUNE 18TH

Nottingham C.C. Trent Lock and the Snar
Barrow-in-Furness Naturalists' Field Club. Sowerby Woods.
Hackney P.S. Newlands Corner.

FRIDAY, JUNE 19TH.

Todmorden P.S. Chester.

SATURDAY, JUNE 20TH.

Nottingham C.C. Trent Lock and the Soar.
Cripplegate P.S. Hayes.

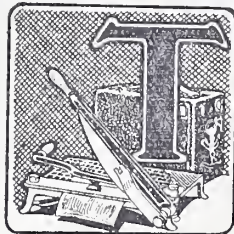
SATURDAY, JUNE 20TH (continued).

Batley & D.P.S. Holmfirth.
South Suburban P.S. London and the River.
Halifax C.C. Otley.
Nelson P.S. L. and C.P.U. Excursion.
Central Y.M.C.A.P.S. Elstree.
Liverpool A.P.A. Blackburn.
Leeds C.C. Y.P.U. Otley.
Paisley Philosophical Institution. Milngavie.
Blackpool and Fylde P.S. L. and C.P.U. Annual Excursion.
South London P.S. Chelsfield to Shoreham.
North Middlesex P.S. Pinner.
Woolwich P.S. Aynsford.
Small Heath P.S. Tewkesbury.
Manchester A.P.S. Blackburn.
Barrow-in-Furness Naturalists' Field Club. Arnside.
Dennistoun A.P.A. Balmaha.
Walthamstow P.S. Rye House.
Stockport P.S. L. and C.P.U. Blackburn for Whalley Abbey.
Govan C.C. Strathblane.
Preston C.C. Whalley Abbey.
Glasgow & W. of S. A.P.S. Stirling.
Northamptonshire Natural History Society and Field Club. Franco-British Exhibition.
Ashton-under-Lyne P.S. Blackburn.
Birmingham P.S. Alcester and Arrow.
Catford & Forest Hill P.S. St. Paul's Cray.
Attercliffe P.S. Grindleford.
Darlington C.C. Barnard Castle.
Wallasey A.P.S. Wirral Coast.
Todmorden P.S. L. & C.P.U. Ramble.
U. Stereoscopic S. Zoological Gardens.
Bolton A.P.S. Borsdane Woods.

Societies will have their meetings announced here if the syllabus is sent to us at the beginning of the Session, or from time to time.



Hints on Arranging Flowers for Photography.



THE comparative simplicity of flower photography makes the arrangement of the flowers themselves of the utmost importance, and many an otherwise excellent flower picture is spoilt by the stiff, formal, or awkward grouping of the blooms themselves.

The appearance of the group must be studied from the position of the lens. What it looks like from any

other direction is quite immaterial. It will sometimes be difficult to do this without disturbing the arrangement. In such a case the camera may be focussed approximately on the group, the lenses and ground-glass removed, and the camera turned completely round. The eye is then placed at the lens and the group viewed as it appears framed by the opening where the ground-glass was. This makes arrangement much easier than when it is done by looking at the image upside down on the focussing screen, and the camera itself cuts off the surrounding objects, and so helps to give a truer idea of the effect.

The first point that has to be attended to is the position that is to be occupied by the flowers which are to form the highest lights of the picture. These may be put close together so as to form a single mass of light, or they may be separated; but if they are separated they must be so disposed or selected that one is of more importance than the rest.

Thus two blooms of equal size may be put together or apart; but if the latter, one must be thrown into shadow, or otherwise rendered subordinate to the other.

There must be no suggestion of a symmetrical arrangement. The groups of three put like this are never very successful. In such a case, for example, one of the lower ones might be higher than the other, and this one should then be made the centre of interest, and should contain the highest light, and if possible should come against the deepest shadow.

An elaborate vase or pot is a great mistake. If it is used, the difficulties are much increased by the way in which the vase competes for attention with the flowers themselves. If a dark background is used, the vase may itself be dark. The little terra-cotta pots of classical outline, sold for painting, are very suitable, as they photograph rather dark, and have no highly reflecting surfaces. If the background is a light one, then a light vase is better. Glass will often do very well in such a case, as the reflections from it will not then stand out so decisively as they would were they to come against a dark ground.

The trick of arranging flowers in a vase with a fallen one lying at the foot has now become so common that its artificiality is apparent at once, and it is better avoided. It may be taken as a safe rule that the more all arrangement is concealed—subject to the grouping being an agreeable one—the better. For this reason it will often be noticed that flowers growing wild make better pictures than when they are picked and put in a vase.

Dog, Cat, or Parrot Special Subject Competition. Awards.

THE entries in this competition far exceeded in number those in the previous special subject competition.

Probably, the fact that every photographer has a dog, cat, or parrot available as a sitter, while a train is not so easily got at, may have had much to do with it. Whatever the reason, photographs of dogs and cats have poured into the office during the last few days, together with a few of the less frequent pets—parrots.

Awards.

The *Photography* silver plaque, which is the first prize, is won by Mr. Ralph Crompton, of Hedgecroft, Walton-on-the-Hill, Surrey, for a print entitled "Chin."

The second prize, *Photography* bronze plaque, is won by Mr. Terry Hunt, of Vyne Road, Basingstoke, with a photograph which he entitles "Twins."

Photography bronze medal, the third award, is won by Mr. William Babbington, of 41, Portland Avenue, Gravesend, with "At Peace with the World."

Certificates have been awarded to Mr. S. E. Ward, Hatfield, Grimsby Road, New Cleethorpes; to Miss Mordaunt, Izarra, St. Jean de Luz, South France; to Mr. Cecil Geen, 93, Vine Street, Myrtle Street, Liverpool; and to Mr. A. Franck, of 8, Eschersheimer, Landstrasse, Frankfurt-on-the-Maine.

Some Possible Difficulties in Ozobrome, and their Removal.

THE latest instructions issued by Ozobrome, Ltd., after making the manipulations as clear as the beginner could possibly desire, point out very justly that, although they are very specific and detailed, they are so simple that he will not want to refer to them after he has once made an ozobrome. The pamphlet concludes with a list of "possible difficulties" and how they may be overcome, which we quote for the convenience of those of our readers who have not seen it.

LOSS OF DETAIL IN HIGH LIGHTS, PATCHINESS IN SKIES, AND DARK MARKS.—These troubles are generally caused by an excess of pigmenting solution remaining on the surface of the plaster, acting upon the image before the two surfaces are squeegeed into close contact. One must, therefore, be particular to draw the plaster twice across water before bringing it into contact with the print, and the squeegeeing should be done without loss of time.

PICTURES ARE FLAT AND DIFFICULT TO DEVELOP.—This trouble may arise from hypo remaining in the bromide print. A difficulty in development may be caused by allowing the plaster to dry partially, in contact with the print or transfer paper.

FRILLING.—This is in nearly every case caused by using a plaster smaller than the bromide picture. The plaster should completely cover the picture, with a margin to spare. No safe-edge is required when this precaution is taken. All the company's pigment plasters are cut to allow such a margin. Frilling may also be caused by the plaster being saturated with water when transferring, in which case it fails to adhere firmly to the transfer paper. With very rough papers, lack of pressure after transferring, or allowing insufficient time between transferring and developing, may give rise to the same trouble. If the plaster backing is stripped before the gelatine commences to dissolve at the edges, frilling at the corner may be experienced.

SPECKS AND AIRBELLS.—In all stages of the process the photographer must look out for airbells and remove them. He must bear in mind that all surfaces should be brought together either under water or with a layer of water between them, and that the water itself should be free from airbells. The critical moment to look for airbells is after stripping the plaster from the bromide print. All transfer papers should be rubbed back and front with a sponge under the surface of water.

A Desert on a Dinner Table.

NO! The illustration of the weary Arab sharing the shade with his patient camel was not photographed in the dark Continent, but on the dinner table. M. Le Messurier who sends it us writes:

"In *Focus* for December 5th, on page 494, you published a photograph entitled 'A Home-made Snowscape,' which made an impression on me. In May last I was in Algeria, and

over the Col de Sfa, and five miles beyond, to Biskra, which I reached with fervent thankfulness.

"Returned home, with various Algerian souvenirs (amongst which was a little leaden model of a camel with an Arab), I bethought me of the article already referred to, and reconstructed on the dinner table, from memory, that burning noontide scene: and here it is.



The shadow of a great rock in a weary land. (Isaiah xxxii., 2.) By H. C. Le Messurier.

cycling alone one day on the fringe of the Sahara, on the road between El Kantara and Biskra, I came at midday on the only patch of shade for many miles, and found it occupied by an Arab and his camel. The scene sank into my memory as I plodded on, in dire distress from heat and thirst.

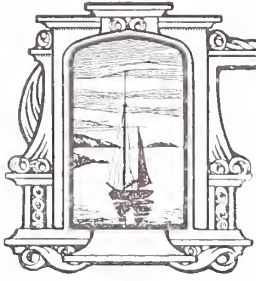
"A rough bit of stone, sand, and plaster of Paris arranged on a board, with a few smaller chips of stone, were all the materials used to set off the models and to form the desert picture. I set out the landscape in the bright sunshine, in order to get the shadow."



FLIGHT OF FANCY

Awarded a Bronze Plaque in the April Advanced Competition

By IRENE E. HOW



Opaque Positives on Glass.

A Process for those who want Prints that will Show the
Greatest Quantity of Detail Possible.



TO reproduce a great deal of fine detail, a fine coating on a perfectly smooth surface is essential. These qualities are found at the very highest in lantern or transparency plates; the support is the almost perfect surface of glass, while the emulsion with which that glass is coated is also specially prepared with a view to fineness. Mr. W. S. Davis recently described in "American Photography" a method of making what, if the bull may be forgiven, may be described as opaque transparencies, for which he claims the advantages of the preserva-

the plate during exposure; or the final picture will be reversed right for left. This is a very simple matter when the printing is being done in an enlarging apparatus or copying camera. When it is printed by contact, an artificial light should be used at some distance from the negative, which is placed in the printing frame film outwards. The camera method is preferable, as in the other case there is always a slight diffusion.

The plates which answer best for this process are, of course, transparency or lantern plates, but others can be used. If the negative has plenty of contrast an ordinary rapid plate



THE RIVER'S BRINK.

Awarded a Prize in the "Focus" Landscape Competition.

BY JOHN GENT.

tion of all the delicate tones and finest details of the negative, of great permanency, and of the power of making the prints smaller or larger than the original negative.

The process consists of making a transparency on glass, coating it with an opaque white backing, and then viewing it from the glass side. As the image is seen from the back, as it were, the negative must be turned film side away from

can be employed, taking care not to over-expose. A fair substitute for a slow plate may be made by immersing a fast one for two or three minutes, in the dark of course, in a solution of 50 grains of potassium bichromate in 10 ounces of water, to which 10 drops of hydrochloric acid are added. The plate is then well washed with water and exposed either wet or dry. It should be remembered that this converts a

fast plate into a slow one and the exposure must be timed accordingly. Care has to be exercised in development, to produce a soft but clear image, and very thin; in fact, development should be stopped as soon as all the details appear. As the image is to be viewed by reflected light, it does not require the opacity that is necessary in a lantern slide or transparency that is to be seen by transmitted light.

After the plate has been developed, fixed, washed, and dried, it should be laid down on a sheet of white paper, when it will readily be seen whether or not it is of the proper strength. If it is too thin it can easily be intensified, while if it is too dense, which is more likely to be the case, it may be reduced, either with ferricyanide and hypo, or with ammonium persulphate, according to the contrast that is desired in the finished picture.

When the transparency is right, the backing up of it with a white opaque coating may be put in hand. For this purpose flake white oil colour and turpentine may be used. A little of the white from a tube is mixed with the turpentine to a thick cream, and is applied to the film side of the transparency which is then set aside where it can dry, away from dust. For some subjects a tinted coating instead of a white one may be used; suitable tints for different pictures

will no doubt suggest themselves. They can be produced by adding a very little of the selected colour to the white.

The picture is finished by mounting. This is a matter of personal taste, but a very simple and effective method is to take a card of sufficient size to provide an ample margin, and on it to paste a second card the thickness of the glass transparency. In this card is cut an opening the size of the transparency, and the plate being placed in this opening, a mount of suitable colour, with a cut-out opening a little smaller than the plate, is placed over all.

If, instead of mounting or framing close up to the picture, it is desirable to have a margin under the glass, this can be secured by placing a black mask on the transparency plate while this is being printed, and the margin so produced may be tinted, if this is wished, by painting it over with coloured pigment before coating the entire plate.

It must not be supposed that this method simply gives a result like that obtained by mounting a P.O.P. print under glass. Not only is the detail rendered more perfectly, but the picture has altogether more depth and richness, while the photographer has great control over it throughout, and even after the photographic side is finished, by modifying the colour of the backing mixture.

"London Churches, Ancient and Modern." An Interesting Book.

THE Metropolitan photographer who has convinced himself that he ought to specialise, as he is so incessantly told to do, might find an inexhaustible and almost unworked field in the churches of the capital.

Whether he devotes himself to the oldest ecclesiastical relics of the past in the Norman and Early English buildings which survived the great fire and the far more destructive restorers, or whether he prefers to deal with Mediæval Fanes, or to record the masterpieces of Wren, he will find within easy reach of his camera enough to occupy all the time he can devote to his hobby.

He will in such a case want some sort of a guide, and if he has the good fortune to see these lines will, we hope, act on our suggestion, and get a copy of "London Churches, Ancient and Modern," by T. Francis Bumpus. This book, which has just been published by Werner Laurie, is written by one who has made the subject the study of a lifetime. No detail seems to have escaped him, nothing that is worth noting passes by unmentioned, and the London reader gets

up from a perusal of the book with the feeling that he has entertained angels unawares, that he has lived in the midst of much that is of the greatest interest and beauty, unheeding it.

The books, for there are two volumes of them, are well illustrated with photographs, but the author makes it quite clear that there is a profusion of work to be done in recording with the camera the most noteworthy features of the buildings with which he deals. It would be more than one man's task to do it adequately, but one enthusiastic photographer could do much, and we commend the subject, as we said before, to those London amateur photographers who are on the lookout for some direction in which to specialise.

It should be fascinating to anyone with an interest in the past of the great city, and it has as an additional recommendation that its provision of subjects for the camera is inexhaustible.

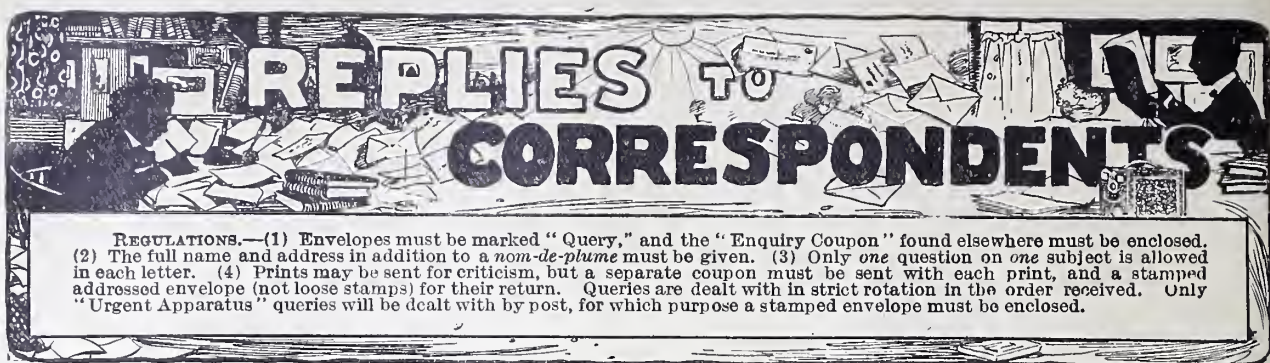
Mr. Bumpus has provided the photographer with a book which will well serve at once as a guide and an inspiration.



THE WINDING BROOK

Awarded a Prize in the "Focus" Landscape Competition,

By JAMES MCGILL.



REPLIES TO CORRESPONDENTS

REGULATIONS.—(1) Envelopes must be marked "Query," and the "Enquiry Coupon" found elsewhere must be enclosed. (2) The full name and address in addition to a *nom-de-plume* must be given. (3) Only one question on one subject is allowed in each letter. (4) Prints may be sent for criticism, but a separate coupon must be sent with each print, and a stamped addressed envelope (not loose stamps) for their return. Queries are dealt with in strict rotation in the order received. Only "Urgent Apparatus" queries will be dealt with by post, for which purpose a stamped envelope must be enclosed.

A*CORRECTION. "When is a fixing bath exhausted?" In "The Week's Query," page 101, last week, we are sorry to say that the formula given in the first paragraph of the reply was incomplete. Three ounces of hypo should be dissolved in the pint of water in addition to the other ingredients named.

J. B. ONIONS (Oakengates).—The Watkins speed number of Ticks film is 180.

C. H. PEARSON (Auckland, N.Z.).—Yes; the apparatus named should be very suitable.

BING GYULA (Budapest).—Thanks for the postage. We make no charge for the indexes.

E. H. CRADOCK (Borrowash).—We are sorry to say that we have nothing of the sort by us, or we would gladly let you have it.

ARNOLD BREWER (Highbury).—We have heard Poole very highly spoken of, and know Lyme Regis, a charming little place, very well. Either should suit you.

P. HAZELL (Chippenhams).—The process is known as the positive collodion process. It is described in "Wet Collodion Photography," by C. W. Gamble, price 1s., or post free 1s. 2d.

R. ELMOFF (Bristol).—We do not know of any simple dodge for making the shutter of a pocket Kodak work as slowly as one-eighth of a second. Many thanks for your good wishes.

FIRE SCREEN (Handsworth).—We cannot give general information in this column, but shall be pleased to answer any specific enquiries to the best of our ability. We have published nothing recently on the subject.

A. P. (East Sheen).—A little gentle rubbing down of the surface of the negative with Baskett's reducer would make it print better; but as you say the negative is irreplaceable, we should not recommend exposing it to anything more risky.

RUFUS E. EVANS (Newcastleton).—None in English. "Le Procédé Rawlins à l'Huile," by Capt. Puyo, 1fr. 50c., can be obtained from the Photo Club de Paris, 44, Rue des Mathurins, Paris, and is the standard book on the subject at present.

R. S. (Woburn Sands).—We have not heard of it before, and should hardly expect that it would be enough to fog the plate appreciably. It takes a lot of such light to do any harm, as we found out in a somewhat similar manner a few years ago.

BROWN BOB (Wigan).—We do not think it would be safe to do more than try and get it as clean as you can with bread crumb. If it is just an ordinary bromide enlargement, it might be soaked in cold water, carefully stripped off the mount and remounted on a clean card, but it is risky.

FERROTYPE (Armley).—Any ordinary camera will do for ferrotype work. Jonathan Fallowfield, 146, Charing Cross Road, London, W.C., sells a "Ferrotype Guide," price 6d. post free, which gives the whole process, and he also supplies plates, developer, etc. You would do well to get the book and read it up.

M. (Edinburgh).—We have had no other complaints, and are sorry to hear of your experiences. We should send a registered letter stating that if the goods are not returned by such a date the facts will be laid before the police of the district in which he resides; and if they do not come to hand we should do so. Many thanks for your good wishes.

G. H. G. (Harrow).—We do not think that anything would justify as high a price as the larger one. Why not ask the British Photo Engraving Co., Coventry, who make the *Photography* and *Focus* blocks, to quote you. The best book on process work is "The Half Tone Process," by Julius Verfassner, price 5s. nett, or post free from our publishers 5s. 4d.

SUPT. ANDREW (Renishaw).—Dissolve in a pint of water, in order named, metol 30 grains, hydrokinone 30 grains, sodium sulphite half an ounce. In another pint dissolve sodium carbonate half an ounce, potassium bromide 15 grains. Equal parts of each are taken to form the developer, or may be diluted with an equal bulk of water if the mixture is too rapid without.

G. B. (Hornsey).—We are glad we did not experience the first spasm. We have not met with anything exactly like your experiences, but we do not like slow tank development at all, and find it extremely provocative of fog and markings of various sorts. Stand development is best when it is completed in about twenty minutes at the most, and the tank should always be so arranged that it can be turned top for bottom and *vice versa* every three or four minutes, as we have pointed out more than once in these columns. It is nothing to do with the particular developer you used, which is a very good one.

H. ESSENHIGH CORKE (Sevenoaks).—We are afraid we cannot hold out any hope of such an alteration.

DUNELM (Durham).—The makers are Butcher and Sons, Camera House, Farringdon Avenue, London, E.C.

S. F. SHINGLETON (W. A. EVERARD).—We have sent your card on to Messrs. Marshall, Brookes, and Chalkley, 15, Harp Alley, London, E.C.

JOHN J. AVERY (Brighton).—The prints should first be fixed in a plain hypo solution of three ounces to the pint, washed in the usual way and dried.

B. A. (Walthamstow).—As good as any we should say; but in any case it is a transaction where one must be prepared to take care of his own interests.

SILVER (Garvagh).—Your reply was on page 408, *Focus*, April 29th. If you get no precipitate at all, either the sulphide is quite wrong or there is no silver present.

C. HAMILTON (Hornsey).—We have some such article in type, but we never yet applied for permission but once (and then we did not get it). We always use a silver key.

H. TOENGES (Forest Hill).—Photography is not permitted in the Crystal Palace, and only with a permit in the other two exhibitions. For permits address the managers.

GWALIA (Bangor).—There is only one way to find out, and that is to get an exposure meter and learn to use it. That is what we had to do ourselves, we cannot say more than that.

BROMIDE (Hampstead).—We cannot help you. As far as we know the idea has not yet materialised, and is nothing but a suggestion. We cannot see how it could be expected to give a really satisfactory result in any case.

W. E. JACKSON (Salonica).—The prints may be put straight into hypo 3 ounces, water 20 ounces, for ten minutes, washed for half an hour in running water or several changes, and then dried. They are then ready for the toning process.

TITTING (Londonderry).—The best way to prevent white ink from running is to make a thick solution of gum arabic, say 200 grains in one ounce of water, and to add this a little at a time to the ink until the consistency desired is attained.

W. S. BREWSTER (Stockport).—We have nothing to add to the full account published in *Photography* for April 14th, a copy can no doubt still be obtained from our publishers. It is certainly much too soon to pronounce upon its permanence. We should have thought bromide would have met your wishes.

SEAL BARK (Manchester).—Autochrome plates, if properly protected, may be developed several months after exposure with perfectly good results. The real risk in touring with them lies in abrasion of the tender film. If proper precautions are taken against this there is not likely to be any trouble in other respects.

A. USBORN (Sheffield).—We should not expect it to be sufficient, although it *might* be. It is a very risky practice to attempt to develop valued negatives with very dilute solutions. Rodinal is best used at a strength of 1 in 30, when the quantity named would be ample. We should allow at least four ounces of the very weak solution if you wish to use it.

MISS DORNFORD (Ramsgate).—Each make of P.O.P. is supplied matt as well as glossy. The exact tone obtained will depend chiefly on the character of the negative used and the depth to which printing and toning are carried. We see no reason to suppose that self-toning papers would not take oil or water colours just as well as the ordinary P.O.P., the gelatine surface of both is identical.

P. H. RIDGE (Guernsey).—If you try again you will find that it is perfectly possible to turn a negative on an ordinary plate into a positive by treating it with the C solution after development and before fixing exactly as an Autochrome is treated. The only trouble is that with the thick coating on an ordinary plate, the result is generally dense and foggy. This seems to apply to all such methods of making positives direct.

B. O. E. (Woburn Sands).—If when the back of the camera is perfectly vertical the image of the front of a house which is itself vertical appears with its lines converging, this must be due to distortion by the lens, due to the use of the extreme edge of the field. The only way to overcome this is to tip the camera more and lower the front. This will give a distorted picture, but one which can be corrected by making an enlargement and swinging the bromide paper, or the small negative, or preferably both.

HOLIDAY INFORMATION.

FOLKESTONE.

Any photographic information concerning Folkestone would be appreciated. —F.W.

Folkestone is a very suitable place for an amateur photographer for a week or two. Good pictures are to be had on the beach of children bathing and paddling; there is the harbour with its shipping; and there is the Fish Market with many varied scenes. Almost every tide the fishing boats come in, and the fish is at once put up for auction. Men are mending their nets, or baiting, and their dress is just what is wanted on a sailor model. Then there is the Warren, a splendid place to take one's camera. I have exposed many a plate there. Near by is Shorncliffe Camp, a very large place, with many pictures of a soldier's life. Dover, Hythe, Saltwood Castle and Lyme Castle are not far away, and motors go out of the town into the surrounding country every day, visiting some very pretty places.

One has no trouble to obtain plates and the use of a darkroom; both are found at every chemist's shop, while apartments can be got in almost every street in the town, at almost any price according to position, etc. The *Photography and Focus* reporter (address from the Editor) has a bedroom he would let, together with the use of his darkroom.

SEATON AND DISTRICT.

H. Rutter would be glad of particulars of Seaton, South Devonshire.

Seaton is charmingly situated on the south coast of Devon. It is not a "popular" seaside holiday resort, but depends entirely upon the charms bestowed upon it by nature. It is beautiful, though modest; and a veritable haven of rest for those who want a real holiday. For the amateur photographer it has unbounded attractions, and in this respect is getting more favoured each year. The magnificent coast scenery is unsurpassed, and is the feature.

Bounded on both east and west by hills, Seaton lies in the beautiful valley of the Axe, which is the key to its health-giving and invigorating climate. On the west is White Cliff, a magnificent headland upwards of 300 feet in height, whilst further west is Beer Head, a most imposing spectacle. Near there are some famous smugglers' caves and Roman stone quarries which are still being worked.

Beer is a quaint old-time village within easy walking distance of Seaton, and full of pictures. The inhabitants are nearly all fishermen, and many pretty and interesting pictures can be obtained as the fishing fleet leaves or enters the bay. Eastward of Seaton is a famous landscape which took place in 1839.

Seaton has a good service of steamers for Weymouth, Exmouth, Teignmouth, Torquay, and the river Dart. An excellently equipped darkroom is at the disposal of the public at Mr. Gosney's, chemist, where all brands of plates, paper, etc., can be obtained. Small charges are made for developing in the

room, but when plates are purchased there is no charge for changing. Developing, printing, etc., are undertaken for those who do not wish to do it themselves.

Apartments are good. There are several excellent hotels (temperance and otherwise), boarding houses, with terms from 21s. upwards per week. Private lodging houses are good, and are always booked up very early for August; other times there is usually little difficulty in obtaining rooms, which can be had from about 7s. 6d. per room, according to situation and time of year.

Seaton is 152 miles from London, and is easily reached by an excellent service of trains from Waterloo by the London and South Western Railway. From the Midlands and North the Midland Railway run some very good trains in connection with the L. and S.W. Bathing is capital. There is a splendid tennis and cricket ground. Fishing is good, river and sea. The population is about 1,400, and living is fairly cheap.—G. ARTHUR PEAKE.

DRESDEN (and Esperanto).

When photographers turn their eyes towards the Continent, nine out of ten think of the under-exposed, badly developed, and insufficiently fixed knowledge they have of foreign tongues. Quite needless will this be in the case of those who visit Dresden in the latter half of August next to attend the Esperanto Congress.

If between now and then the photographer takes the trouble to get a moderate, working knowledge of Esperanto, he will have such an experience as he never had before. He will have Dresden, Berlin, and the surrounding country opened up to him, not by paid guides on conventional lines, but by natives, in many cases fellow photographers. If he cares to extend his tour at the end of the congress he will be enabled in a similar way to explore Vienna, the Austrian Tyrol, the Rhine, etc.

It is by no means necessary to learn Esperanto to participate enjoyably in the visit to Dresden. But the trouble of doing so is so small no one need grudge it. Practically every large town has its Esperanto Society, the secretary of which will gladly give anyone information as to the congress or the study of the language, or the writer will reply to any queries sent to the office of *Photography*. The odd moments of a month, in trains, etc., are quite sufficient to master the grammar and a good vocabulary, and those of another may be spent in reading and speaking; at the end of that time one will be able to take full part in and to enjoy thoroughly the unique experience of meeting foreigners on terms of perfect equality as regards language.

The congress will occupy a week, but a couple of days are needed to get to Dresden and another couple for the return journey, unless some extension or deviation be entered on. As to cost, the whole thing will be done for about £1 per day.

"Venu kaj alportu vian foto-grafilon," which means "Come and bring your camera."—FOTOGRAFIŝTO



Stock Toning Bath.

A sulpho-cyanide toning bath which is said to keep well, in the dark, is made of the following:

Distilled water	... ..	2 ounces
Gold chloride	... ..	15 grains
Strontium chloride	... ..	150 grains

The gold is dissolved in the water, which is then heated to 100° Fahr. and the strontium added. The mixture is then heated just short of boiling, and fifty grains of potassium sulpho-cyanide dissolved in two ounces of water and similarly heated, are mixed with it. When cold the solution is filtered into a clean stoppered bottle, a couple of drachms of distilled water being poured through the filter afterwards into the bottle to wash it. One part of this stock solution to twenty parts of water forms the toning bath.

Test for Hypo.

The last drainings of wash water from plates or prints should be allowed to drip into water to which just sufficient of the following solution has been added to give it a faint pink tinge. If the colour is changed or discharged the hypo has not all been washed out.

Potassium permanganate	... ..	5 grains
Caustic soda	... ..	20 grains
Distilled water	... ..	5 ounces

Developer for P.O.P.

The paper if to be developed must be kept from a strong light more carefully than if it is merely to be toned and fixed in the ordinary way. The image should be printed until faintly visible all over, and the paper then immersed for ten minutes in a ten per cent. solution of potassium bromide. It is washed for ten minutes and then developed with hydrokinone.

Hydrokinone	... ..	40 grains
Sodium sulphite	... ..	160 grains
Water	... ..	10 ounces

(2.)		
Sodium carbonate	... ..	240 grains
Ammonium carbonate	... ..	240 grains
Ammonium bromide	... ..	20 grains
Water	... ..	10 ounces

These two solutions are mixed in equal parts. After development the prints are washed for twenty minutes, and may then be toned and fixed as usual. All the operations may be carried out in a good supply of artificial light.

Single Transfer Paper.

Any ordinary white or tinted paper may be used as single transfer paper if it is first sized by immersing it in

Shellac	... ..	1 ounce
Borax	... ..	3 drachms
Boiling water	... ..	10 ounces

The borax is dissolved in the water, and the shellac added a little at a time, the mixture being boiled until it is dissolved. The solution is used cold, and the paper simply soaked in it for a minute or two and pinned up to dry.

MOUNTING & ARRANGING PHOTOGRAPHS.

A Simple & Effective Method.

By E. Staniland Pugh. Special to "Photography."



THE somewhat perplexing problem as to the best method of

mounting and arranging a collection of photographs in a tasteful and effective manner is one which requires thought and consideration. Most of us, some time or other, have attempted its solution, with more or less success; but it is a matter for regret that in many cases the difficulty is met by the purchase of a commercial album, in which the prints are slipped under openings identical in size and shape—a course selected as representing the least expenditure of trouble.

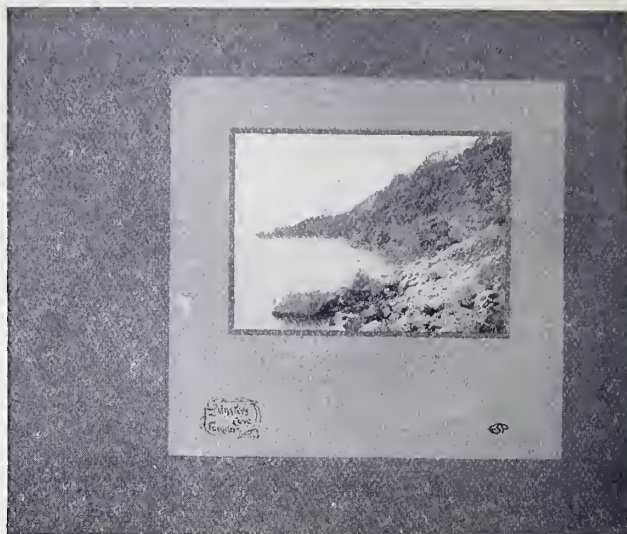
This arrangement gives the collection the appearance of a scrap book—an appearance not improved by the fact that four or more prints are often seen at one opening of the book, some of them being upright and others oblong. This is bound to have a detrimental effect from an artistic point of view, and detracts from any merit that otherwise might be apparent in the work.

Many alternative methods have been suggested from time to time, some, of course, better than others, but most having some drawback, whereby they fail to serve their purpose.

Having found what I believe to be a practical way of dealing with photographs—a way which seems to possess distinct advantages, as well as one allowing unlimited scope for the individual treatment of the prints—it is with the hope that such may prove of interest to readers of *Photography* that this system has been described.

The essential points to be borne in mind in making the prints are (1) that there shall be no restriction whatever as to the process to be employed, and (2) that when they are ready for mounting no circumstances shall prevent us from trimming them down if necessary, so that parts which interfere with the general effect, by their prominence, can be cut away.

At the outset, an album defies these requirements. One cannot have a bromide and P.O.P. print on one page and a carbon and a platinotype facing them on the other. Such a combination would be anything but desirable. As to trimming, it more than often happens that many a good print is spoilt because it contains some unsightly object, which might be trimmed away were it not for the fact that by so doing the print would



then be too small for the opening in some particular album.

In the present method, the question to be considered when making the prints is not that a certain negative must be printed on P.O.P. because the space it is to occupy in an album comes next to one on that paper, but simply which process will be the one to yield the very best result which the particular negative will produce. We are free to make our prints in carbon, platinotype, or bromide, with rough or smooth surfaces, tinted, toned, or otherwise, and we are at liberty to trim them down to any required shape.

If the work is in quarter-plate size, we may obtain a supply of "Nature Paper," which can be purchased from all photographic dealers, and is sold in packets



containing a certain number of sheets of various shades of colour. The browns, greens, and greys are the most useful.

The best size for the purpose will be 10 by 8; and it is advisable to get two packets, one containing thick sheets and the other thin ones, and also a packet of "paste on tints," which are similar in colour to the "Nature" mounts, but smaller in size and of very thin substance.

Many instructive articles have appeared from time to time in *Photography* describing the method of multiple mounting, and readers are advised to refer to them, and also to study the illustrations which are often reproduced from prints mounted in this way, to get ideas which they may follow. Simplicity should be the chief aim; we should not do as "The Walrus" humorously advised recently, and make the mount so thoroughly conspicuous as to draw (on humane grounds) the whole of the attention of the observer from the print.

It is usually recommended, when several photographs have been completed, that holes should be punched through each mount and then the lot strung together in book form—a system which sounds well enough in theory, but in practice is far from satisfactory. For it will be found that in a short space of time the prints begin to suffer considerable damage from their delicate surfaces coming into contact with and rubbing against the rough backs of the mounts immediately above them, which eventually ruins them. By the method described herein it is quite impossible for the prints to suffer injury in this manner.

When mounting the prints, it is preferable just to paste round the edges of the tints and photograph to the extent of a quarter of an inch—not more—the best method being to use a good commercial mountant, running the paste round with the finger. This will avoid risk of cockling. Then a sheet of tissue paper, cut a trifle smaller than 10 by 8, is placed over the photograph, care being taken to keep it close to the left-hand side, and a thin piece of the "Nature" paper, preferably of the same colour as the original mount, is placed above it to form a cover. Three small slits are made at intervals down the left-hand side, and small brass paper-fasteners are inserted and pressed down. The cover is thus attached. It is a good plan to touch the corners of the tissue paper with paste to keep it always adhering to the cover—a convenience which not only keeps it clean and smooth, but saves the trouble of turning it over, with risk of tearing, every time the photograph is examined.

It will be seen that by this system each photograph may be dealt with according to its merits. Each is contained in its own mount and cover, the latter affording

ample protection to the print, and preserving its surface. There can be no fear of any damage occurring to the print; but if by chance the mount should be accidentally spoilt at any time the photograph can easily be removed and placed upon a new one.

The photographer can exercise his artistic taste to any extent. He will be surprised at the variety and beauty of his collection, for prints which seemed un-

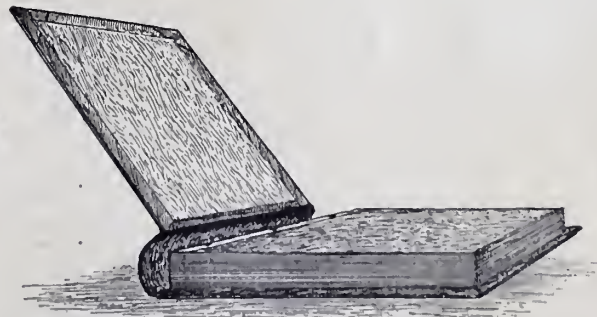
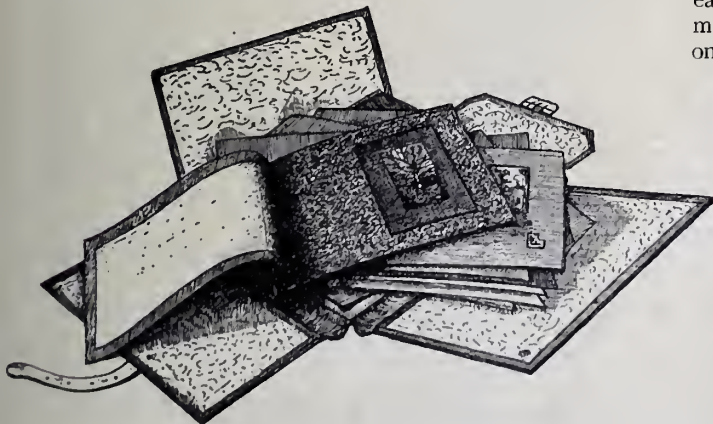


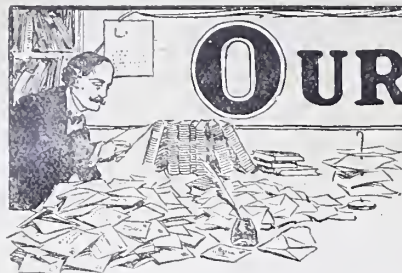
interesting and commonplace in an album possess a greatly improved appearance when printed in a suitable process, and judiciously trimmed and mounted in this way.

It only remains to say that these self-contained mounts should be kept between covers. These can very easily be made by anyone so inclined, or, if preferred, the prints can be enclosed in portfolios. Any stationer will supply art vellum for making these covers with—a material which will be found to give them a very neat appearance.

By adopting a system such as this, there is the additional advantage that the photographs can be arranged in any desired series. Each cover or portfolio can be made to hold a separate collection, such, for example, as a record of a particular holiday tour, or architectural work, or marine studies; others are sure to suggest themselves.

It is generally advisable only to have one print upon each mount, but in the case of portraits or groups they may perhaps with advantage be placed several upon one page.





OUR COMPETITIONS



BEGINNERS' COMPETITION.

Open to all photographers who have never taken an award.

PRIZES.

First Prize.—A signed copy of "The Complete Photographer," a half-guinea work by Mr. Child Bayley, now in its second edition.

Second Prize.—A free subscription to *Photography and Focus* for twelve months.

One or more certificates of honourable mention will also be awarded.

RULES.

(1) Each competitor can send as many prints as he likes, but each print must bear on the back the coupon, published each week, the name and address of the sender, the title of the picture, and no other writing whatsoever.

(2) No print will be eligible that is larger than 5 in. x 3 in. (postcard size) or 5 in. x 4 in.

(3) No print must be mounted.

(4) No handwork other than simple spotting is permitted on negative or print, nor shading or dodging of any kind. It is distinctly understood that entry in the competition implies a declaration by the competitor that this rule has been complied with; and in case of dispute the editor shall have the right to call for the negative, from which the entry purports to be a simple direct contact print.

(5) No prints will be returned, and no correspondence with regard to the competition can be undertaken.

(6) The publishers of *Photography and Focus* shall have the right to reproduce, without payment, any of the prints sent in, winning or otherwise. But except the winning prints, the names of competitors of other prints that may be reproduced will not be published without the competitor's consent.

(7) All entries must be addressed "Beginners' Competition," the Editor of *Photography and Focus*, 20, Tudor Street, London, E.C., and must be delivered at that address by the first post on the closing date at the very latest.

CLOSING DATE.—Tuesday, June 30th.

TITLE COMPETITION.

The picture for the current title competition, and the rules of the competition, will be found on pages xxxviii. and 127 this week. The coupon is on page xii. Entries close on Friday, June 26th.

SPECIAL SUBJECT COMPETITIONS. OPEN TO ALL READERS.

PRIZES.

First Prize.—"Photography" Plaque in Silver.
Second Prize.—"Photography" Plaque in Bronze.
Third Prize.—"Photography" Medal in Bronze.
One or more certificates will also be awarded.

RULES.

(1) The subject of each photograph entered must be that announced for the particular competition.

(2) Each competitor can send as many prints as he likes, but each print must bear on the back the name and address of the sender, the title of the picture, and no other writing whatsoever. Each print must have attached to it a coupon for the competition of the month, which will be found in each issue of the paper.

(3) No print must be mounted. No handwork other than simple spotting is permitted on negative or print, nor shading or dodging of any kind. It is distinctly understood that entry in the competition implies a declaration by the competitor that this rule has been complied with; and in case of dispute the editor shall have

the right to call for the original negative, from which the entry purports to be a simple direct contact print.

(4) No prints will be returned, and no correspondence with regard to the competition can be undertaken.

(5) The publishers of *Photography and Focus* shall have the right to reproduce, without payment, any of the prints sent in, winning or otherwise. But except the winning prints, the names of the senders of other prints that may be reproduced will not be published without the sender's consent.

(6) All entries must be addressed "Special Subject Competition," the Editor of *Photography and Focus*, 20, Tudor Street, London, E.C., and must be delivered at that address by the first post on the closing date at the very latest.

SUBJECTS AND CLOSING DATES

A River Scene. Closes Tuesday, June 30th.
A Plant, or Flower, taken growing out of doors. Closes Friday, July 31st.

A Harvest Scene. Closes Monday, August 31st.

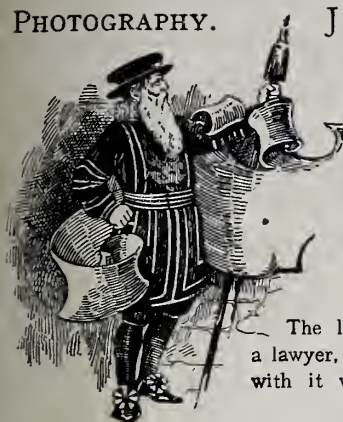


"Photography" Medal. Actual size.



"Photography" Plaque. Actual size.

Weight in silver over three ounces.



What's Mine's My Own--Sometimes.

A Few Everyday Copyright Facts, as they affect Amateur Photographers.

The law of copyright, like most other laws, is an elaborate and involved affair, which it takes a lawyer, and a clever one at that, to understand; but there are a few everyday facts in connection with it which are simple enough, and which ought to be known by every photographer.

What is copyright?

Copyright means an exclusive permission to copy, either by photography or by any other means, the work to which the word copyright is applied.

MARKING a picture copyright.

Many photographs and designs are marked with the word "copyright." This is simply a sort of "keep off the grass" noticeboard. A print is not any more copyright because it is marked so (at least in Great Britain), and the absence of the word does not mean that it is not copyright.

WHAT confers copyright?

The mere making of the picture creates a copyright in it. The amateur photographer who exposes his plate on the subject he selects, treats it in the way he thinks most effective, and makes his print, has by so doing created a copyright in that print, and that copyright is his. He can mark the print "copyright," if he likes, as a warning to others; but whether he does so or not, it is copyright, and he is the owner of the copyright.

REGISTERING.

An impression exists in many minds that a print is not copyright until it has been registered. This is not the case. Registration is simply a formal claim to the copyright which the photographer already possessed.

THE importance of registration.

The importance of registration lies in the fact that no prosecution or claim for damages for infringement can be supported until the photograph has been registered. And no infringement which took place before registration can be the subject of a claim. Nor can the copyright in a photograph that has not been registered be sold or transferred.

How to register.

Registration is a very simple operation. A Londoner can go to Stationers' Hall, just off Ludgate Hill, pay a penny for a form, which he can fill up on the spot and hand in with a print of the photograph and a fee of one shilling, and the thing is done. A photographer out of London must write for his forms, and register through the post.

FILLING up the form.

The form is quite a simple one. The name and address in full have to be written at the top in the space provided, and in the other columns there must be given a short description of the work, such as "St. Joseph's Church, Highgate, from the N.E.," or "Portrait of Miss Mary Smith," and in the case of an amateur the full name and address must be repeated in the columns headed "Name and place of abode of proprietor of copyright" and "Name and place of abode of author of work," as under all ordinary circumstances the amateur is the proprietor and author. Two columns, headed respectively "Date of agreement" and "Names of parties to

agreement or assignment," are under such circumstances merely occupied by a dash of the pen or the word "None," as they are only intended for use when the copyright is being transferred.

How to lose copyright.

The sale of a print before or after registration does not necessarily imply that with it is sold the right to reproduce it; much less does it imply that the entire copyright of the picture is sold. But the sale of the negative before registration destroys the copyright in it.

WHAT can be copyrighted.

A photograph of practically anything can be copyrighted. Although at Stationers' Hall they have certain rules and



A Basket of Trouble.

By Joseph Wilmore.

limitations which are best ascertained by trial, still, generally speaking, the broad assertion holds good. A photograph of an old drawing or painting, for example, may be copyright. The photograph of an avenue, or house, or cottage may be copyright. This means that the photograph may not be copied; but, of course, it in no way restricts persons from making a photograph of the drawing or painting or cottage for themselves. Only they must make it direct, and not copy the copyright photograph.

PHOTOGRAPHS of private property.

Some people imagine that because they own a picturesque cottage, or a fine park, that they also own the copyright of views of the property. Some have even gone to the length of photographing their property and registering the photographs. This does not in any way prevent other people from photographing it, if they can do so without trespassing, or infringing other rights. They may not photograph the

registered photographs, but they may photograph the cottage or park as often as they like. There is no copyright in scenes themselves, but only in pictures (photographs or otherwise) of scenes.

★ ★ ★

COPYING photographs.

When he is asked to copy a photograph, the amateur photographer comes up against the other side of the copyright law. It is no longer a question of what property he possesses in a photograph, but what property someone else possesses.

★ ★ ★

WHAT is copying?

He may ask, "What is meant by copying?" It includes reproducing, by any means and in any size, the whole or part of the original, for sale, hire, exhibition, or distribution. A lantern slide by reduction and an enlargement are equally infringements if they are made from a copyright original. It would be an infringement to make an ozobrome from a copyright bromide postcard. It would equally be an infringement to make a line sketch or drawing from the postcard. It follows that copyright is not infringed provided the copying is done strictly for the private delectation of the copier. This is a point sometimes overlooked.

★ ★ ★

COPYING portraits.

The amateur photographer is sometimes asked to make copies of a portrait of some local celebrity for sale at a bazaar or some similar purpose, and may wonder how far he can do this with impunity. All depends on the circumstances under which the original was taken. If the sitter went to the studio of the professional photographer to be photographed, and paid the ordinary price for the portraits, then the copyright in those portraits belongs to the sitter, and he can give permission to anyone to make copies of them. It frequently happens, however, that men who are prominent in their own district are invited by the photographer to sit for their photographs, and are supplied with copies either free of charge or at a reduced rate. In such cases the gift of copies, or the reduction in price is assumed to be what the photographer concedes in return for being permitted to retain the copyright, and the sitter cannot grant permission to anyone to copy his portrait.

SPECIMENS.

One other point to which reference may be made more concerns the professional. May he make a print from a negative of a sitter, and exhibit that print in his showcase or shop window? This turns on the point considered in the previous paragraph. If the sitter paid for his portraits in the ordinary way the copyright in them is his, and the photographer is infringing that copyright if he makes a print of one of the portraits and exhibits it as a specimen. The proper course, obviously, is to ask for permission.

★ ★ ★

FAKED prints.

In these days of "oil" and "gum" there may be a wide difference between a straight print from the negative and the final result, and it becomes interesting to know which should be the form in which the photograph is registered. The point has never been decided in the courts, but a "straight" print would presumably show more than the "faked" print, and for that reason would be the better to use, in registering. One no doubt would cover the other, in most cases.

★ ★ ★

IGNORANCE is bliss.

The Englishman is presumed to know the law of the land; and in copyright matters, as in others, ignorance of the law, or ignorance that the thing copied was copyright, is no defence. It will perhaps lessen damages or penalties, but it cannot avoid them.

★ ★ ★

FINDING out what is copyright.

To ascertain if any particular photograph is registered, search must be made on the files at Stationers' Hall. A fee of one shilling is charged, and the register is open daily at ordinary business hours for the purpose.

★ ★ ★

PERMISSIONS.

When a print is sold to a newspaper or magazine, it should be distinctly stated in writing at the time that the photographer sells the right to reproduce it in one issue of that particular magazine, and that only.



Some Dark Room Uses of Cotton Wool.



THE other day in conversation with a photographic dealer in our city, the fact cropped up that I was the first customer for a twelve-month who had bought from him any cotton wool, or, to use its proper term, any absorbent cotton. Years ago, when I first took up photography, I do not know that I ever used any cotton, or if I did I relied on little bits which had come to me in the form of packing; certainly, I never bought any. But for a long time now a biscuit tin containing a roll of the cotton, as sold by chemists, has a prominent place on my shelves, and is in almost as constant use as the hypo itself.

It will be found that the "absorbent cotton" is quite different from ordinary cotton wool. It feels different. It takes solutions in a different way. Above all, it is purer. It is very cheap, a roll of the best quality costing a couple of shillings forms a year's supply, if it is kept in a clean tin and not used wastefully.

The purposes to which it is put are numerous. A little tuft of it rests in a small tumbler beside the sink. As the washing of each negative is finished, it is held under the tap for a moment, and gently rubbed with the wool. This removes that gritty deposit which is so unsightly on negatives that have been washed in hard water. There is no need to take a fresh piece of cotton wool each time for this, if it is kept in some vessel which will protect it from being contaminated with stray solutions.

Another use is for filtering. A plug of it inserted loosely in the neck of a funnel will filter sediment from a liquid much more quickly than filter paper, and there is no risk of the paper breaking. All that is needed is a little care in pouring in the first part of the liquid not to displace the wool. It should not be wedged in, or the filtering will be very slow. The weight of liquid in the funnel should keep it in its place. If varnish is to be filtered, the funnel may be just a cone of writing paper, pinned or gummed to keep its shape, and the tip cut off and plugged with the cotton wool. Wool once used for filtering should be thrown away.

Many other uses will suggest themselves when once the wool is at hand. I use it occasionally in the development of carbon prints, lightly dragging a tuft of it, under water, across any heavy shadows that are to be lightened. It must be done carefully to avoid marks, but this is not difficult. A "Buckle's brush," a glass tube with a loop of string put through it, the loop put round some cotton wool which is thus drawn partly into the tube, which serves as a handle, makes a capital tool for coating paper with the iron mixture in blue printing. The wool is useful also in vignetting, and a piece on the end of a wire will be found a convenient way of holding back parts of an enlargement when exposing with an enlarging lantern. In fact, it is an all-round useful material, and it seemed to me surprising, therefore, to be told that a dealer in a large way of business should be asked for it so seldom.

W. F. ROBB.



SUNSET,

BY HERBERT MILLS,

Awarded a Prize in the "Focus" Landscape Competition.

SOME "GREATER BRITAIN" COMPETITION PORTRAITS.



"My Dollie" (N. CHINA). By REV. B. M. MCOWAN.
THIRTY-FIVE BELOW ZERO (OTTAWA, CANADA). By MAJOR MORRISON.
THE CHOSEN ONES (EAST GRIQUALAND). By E. G. HOLLIS.

CHURCH PARADE (INDIA). By A. GOLLEDGE.
A PORTRAIT (RHODESIA). By J. HERBERT HARDY.
A PORTRAIT (RHODESIA). By J. HERBERT HARDY.
AN ENGLISH ROSE (CAPE COLONY). By T. W. BAYNES.
PROFESSIONAL AND AMATEUR (QUEENSLAND). By C. THEO. WOOD.

Imperial P.O.P.

Imperial P.O.P.

MADE IN 3 TINTS

- (i.) Mauve.
- (ii.) White.
- (iii.) Pink.

Unrivalled in brilliancy, in wealth of detail,
and delicacy of tones.

Imperial P.O.P.

BUSINESS NOTICES.

OFFICES.—20, Tudor Street, London, E.C. Telegrams: "Cyclist, London." Telephone: 5610 and 5611, Holborn.

PUBLISHING DATE.—*PHOTOGRAPHY AND Focus* is on sale throughout the United Kingdom every Tuesday morning.

SUBSCRIPTION.—*PHOTOGRAPHY AND Focus* will be forwarded regularly at the following rates: GREAT BRITAIN. ABROAD.

	s.	d.		s.	d.
Twelve Months ..	6		Twelve Months ..	10	10
Six Months	3		Six Months	5	5
Three Months ...	1	8	Three Months ...	2	9
Single Copy	1	1	Single Copy	2	1

REMITTANCES.—Postal Orders, Cheques, etc., should be crossed and made payable to Iliffe and Sons Limited.

ADVERTISEMENTS.—All communications on advertisement matters should be addressed—The Advertisement Manager, *PHOTOGRAPHY AND Focus*, 20, Tudor Street, London, E.C. All copy for displayed advertisements for the issue of any particular week must reach Tudor Street by the first post on Monday morning in the week previous.

PREPAID ADVERTISEMENTS.

SALE AND EXCHANGE (for Amateurs only).—1d. per word, minimum 9d.

PROFESSIONAL AND TRADE.—Three words 2d., minimum 1/-

All advertisements to be inserted on these terms must be accompanied with remittance. To ensure insertion, letters should be posted in time to reach the offices, 20, Tudor Street, E.C., not later than first post on Wednesday.

BOX NUMBERS.—For the convenience of advertisers, letters may be addressed to numbers at the office of the paper. When this is desired, 2d. will be charged for registration, and three stamped and addressed envelopes must be sent for forwarding replies. Only the number will appear in the advertisement. Replies should be addressed, "No. 000, c/o *PHOTOGRAPHY AND Focus*, 20, Tudor Street, London, E.C."

DEPOSIT SYSTEM.—Persons who hesitate to send money to unknown persons may deal in perfect safety by availing themselves of our Deposit System. If the money be deposited with *PHOTOGRAPHY AND Focus* both parties are advised of this receipt, and upon intimation of the arrival and acceptance of the goods, the money is forwarded, less a charge of 1/- for registration. The time allowed for a decision after receipt of the goods is three days. For all transactions exceeding £10 in value, a deposit fee of 2s. 6d. is charged. Cheques and money orders should be made payable to the Proprietors, Messrs. Iliffe & Sons Limited, and addressed to them at Coventry.

PUBLISHING NOTICE.—Communications for the Publishers should be addressed, Iliffe & Sons Limited, 20, Tudor Street, London, E.C.

EDITORIAL NOTICES.

ADDRESS.—All communications for the Editor should be addressed: The Editor, *PHOTOGRAPHY AND Focus*, 20, Tudor Street, London, E.C.

TO CONTRIBUTORS.—The Editor will be glad to consider original up-to-date manuscripts on photographic subjects. All contributions must be typewritten, or in very legible handwriting, on one side of the paper only, and should bear the name and address of the sender. Letters or communications arising out of matters already appearing in the paper are not paid for. The Editor disclaims legal responsibility for the safety of matter submitted to him, but he will endeavour to return rejected manuscripts, etc., when a stamped addressed envelope is enclosed for that purpose. No notice whatever can be paid to communications without the name and address of the sender, not necessarily for publication.

PRINTS FOR CRITICISM.—Readers sending prints for criticism or advice are notified that in all cases it is understood that by so doing permission is given for their reproduction, without fee, in *PHOTOGRAPHY AND Focus*.

PRINTS FOR REPRODUCTION.—Reproduction fees are only paid by arrangement beforehand. The sending of a print, without any condition stated, will be taken as permission to reproduce it without fee. The Editor will be glad to consider for publication, with or without letterpress, photographs of special interest, on terms to be arranged.

PAYMENTS.—Articles and illustrations are paid for on acceptance.

INTERVIEWS.—The Editor will be at 20, Tudor Street, on Wednesdays, between the hours of 9.30 and 11.30 a.m., but can only be seen at other times by appointment.



AN EXHIBITION was held last week by the Bromley Camera Club in the School of Science and Art, Tweedy Road.

RUSSELL'S (BIRMINGHAM), LTD., is a company just registered with a capital of £1,000 in £1 shares to carry on the business of manufacturers of and dealers in fancy goods, printers, photographers, etc. The registered office is at 67a, Worcester Road, Birmingham.

THE LIPPMANN CELLULAR PHOTOGRAPHS, recently described in *Photography and Focus*, it is now announced, can be printed. The paper on which the print is made is constructed, like the negative itself, with its surface divided into microscopic facets. At present the whole process is only in the experimental stage.

PHOTOGRAPHS OF WELSH FARMHOUSES. The Rhosllanerchrugog Chair Eisteddfod Committee is offering a prize of half a guinea for a set of six photographs of old Welsh cottages or farmhouses, any size of print being eligible. Entries, which will be received up to July 1st, should be sent to the secretary, Brook Street, Rhosllanerchrugog.

Books for . . . Photographers. .

Science and Practice of Photography.

By CHAPMAN JONES, F.I.C., F.C.A., F.R.P.S.
Price 5/- nett. Post free 5/4.

Instruction in Photography.

By SIR WILLIAM ABNEY, K.C.B.
Price 7/6 nett. Post free 7/10.

Practical Orthochromatic Photography.

By ARTHUR PAYNE, F.C.S.
Price 1/- nett. Post free 1/2.

Successful Negative Making.

(Illustrated.) By T. THORNE BAKER, F.C.S., F.R.P.S.
Price 6d. nett. Post free 7d.

All About Enlarging.

(Illustrated.) By C. WINTHORPE SOMERVILLE, F.R.P.S.
Price 6d. nett. Post free 7d.

Photography Made Easy.

(Illustrated.) By QUI-VIVE.
Price 6d. nett. Post free 7d.

Lantern-slide Making and Exhibiting.

(Illustrated.) By JOHN A. HODGES, F.R.P.S.
Price 6d. nett. Post free 7d.

Pictorial Landscape Photography.

(Illustrated.) By J. G. WARBURG.
Price 6d. nett. Post free 7d.

A full list sent on receipt of a postcard.
ILIFFE & SONS LTD.,
20, TUDOR ST., LONDON, E.C.

AUTOCHROME PHOTOGRAPHS OF BLOOD-STAINS were put in as evidence at a coroner's inquest at Middlesbrough last week.

ALPINE PHOTOGRAPHS. Some fine pictures of snow-covered peaks, Indian as well as Swiss, are reproduced in "Country Life" for June 6th, together with a short article by Mr. S. Donkin.

THE BIRMINGHAM PHOTOGRAPHIC CO., LTD., of Criterion Works, Stechford, ask us to point out with reference to their "Nonstress" bromide paper, that they have now succeeded in extending that particular advantage to the other grades, so that in future all their bromide papers will be "Nonstress."

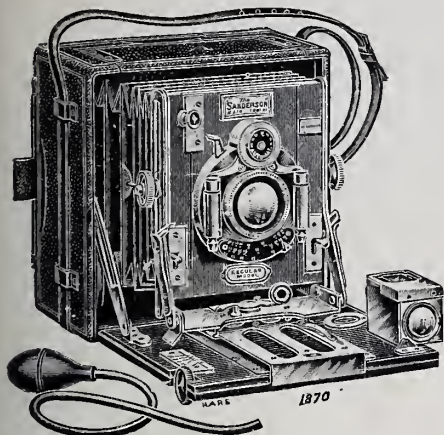
LICENSED TO PHOTOGRAPH. Two men entered a saloon in Montreal and took a flashlight photograph of the bar. As they refused to sell the negative to the proprietor, he had them arrested for "doing photographic business without a license." They were fined £4 each and costs.

AT THE CRIPPLEGATE PHOTOGRAPHIC SOCIETY'S annual meeting, the following officers were elected: Chairman, W. Ward; vice-chairman, W. Bensley; committee, Messrs. Clarke, Collingwood, Depledge, Denyer, Lester, and Vogeler; portfolio secretary, M. Eaton; treasurer, G. Pitt Smith; honorary secretary, H. S. Cuming, 234, North End Road, West Kensington, W.

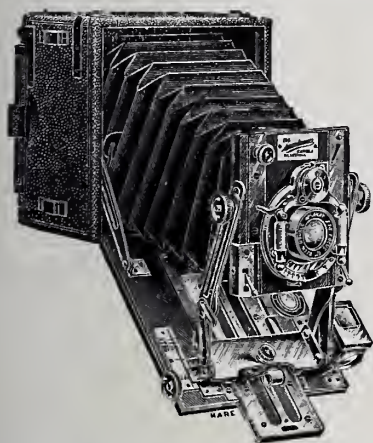
THE AUTOCHROME EXHIBIT at the Franco-British Exhibition, to which we referred last week, is in Class 12, Building No. 8, which is reached by turning to the right on entering the exhibition by the Wood Lane entrance. It contains twenty-six pictures 18 x 24 cm. and thirty 13 x 18 cm. Specimens of work on Lumière plates and papers are also shown by Paul Berger (Paris), M. Fiarraz (Chamonix), F. Boissonas (Geneva), and M. Pizetta (Nice). This exhibit in itself is well worth a trip to the exhibition to see.

LIZARS'S CATALOGUE is a bulky and fully illustrated price list, primarily of the well-known "Challenge" cameras, but including all the other requirements of the photographer. It also contains a great deal of useful information and formulae dealing with the standard processes, and brought right down to date by the inclusion of carbograph, the oil process, autochrome, etc. It is issued by Messrs. J. Lizars, of 101 and 107, Buchanan Street, Glasgow.

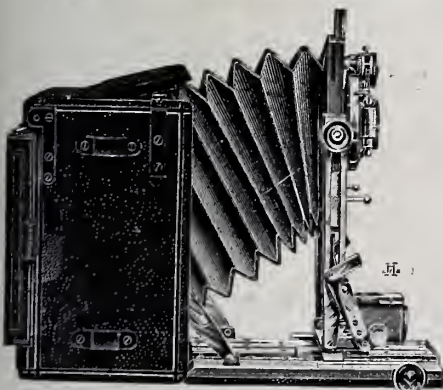
THE PHOTOGRAPHIC RED BOOK, the annual of the Affiliation, has just been issued for the year April, 1908, to April, 1909. It contains a list of the affiliated societies, and particulars of the work of the Affiliation, lectures available, places to photograph, etc., and in an appendix gives a quantity of useful information. Each member of an affiliated society is entitled to a copy, which acts as a permit to photograph in many places.



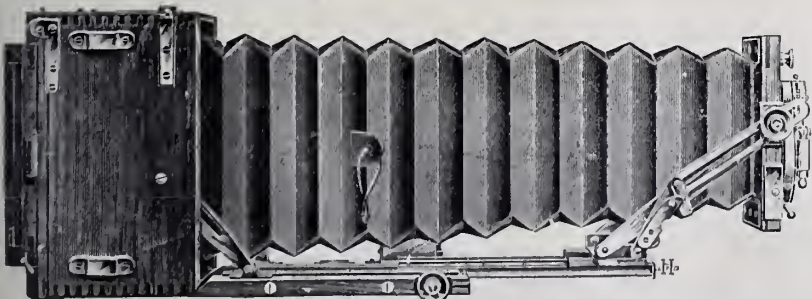
This is a Sanderson with the Lens in the normal position.



Here the Lens has been dropped by means of the Sanderson Front, to get an excess of foreground.



The Lens can be raised by the Sanderson Front to give an excess of sky.



Pictures may be doubled in size by extending the Sanderson front and removing the front part of the Lens.

Why the "Sanderson" is so very much better than other Cameras.

The Sanderson Universal Front is a patent, or rather a series of patents, any one of which would be useless without all the others. The Sanderson Front is called Universal because it rises, falls, recedes, extends, or **swings in a perfect arc at the will of the operator.** Yet it can be locked rigidly and instantly in any position.

Then again the Lens is swung on its axis and the locking nuts that control its movements are fitted at the end of the axial pins.

Each of the swinging Arms that carry the Lens front have one single slot that goes through in their entire length, and in these slots the axial supports of the Lens can pass freely up and down, backwards or forwards, **always preserving its balance, and ready to be locked rigidly in any position by a single touch.** All these wonderfully simple movements are patented.

The great point to remember is that in buying a Sanderson you are getting the finest, most famous, and most useful Camera that the world produces.

You are buying a most beautifully made Camera, one that will serve you well and can always be absolutely depended upon. You are buying a Camera with a reputation that is above reproach.

There are Field Cameras and Hand Cameras in the Sanderson series, and the prices range from

£4 4s. to £31 12s. 6d.

Call at any good Photographic Dealer's and ask to see a "Sanderson."

Write for a booklet (stating whether you want a Hand or Field pattern) to the manufacturers:

HOUGHTONS

The largest manufacturers
of Cameras in the Kingdom,

**88/9, HIGH HOLBORN,
LONDON, W.C.**



THE LATEST IN APPARATUS & MATERIAL.

A Reflector Camera at a Very Low Price—The Fulvue.

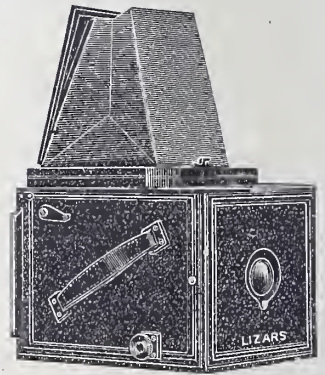
THE greatest objection which can be raised to the reflector type of camera is that hitherto it has generally been a very costly type. We are very far from saying that the cost has not been justified by the workmanship and the capabilities of the apparatus. We believe some of the high-priced reflex cameras to touch the high-water mark of camera design and construction, but they have been, of necessity, quite out of the reach of the rank and file of photographers. One of the features of this year's apparatus is the provision of reflex apparatus at prices that very much increase the size of the sphere to which they appeal, and one of these simplified patterns—for that is what they amount to—is Lizars's "Fulvue."

In this instrument, which is shown in the illustration below, the most notable feature is the shutter, which is formed by the mirror and the base of the camera. The speed with which this works is controlled from outside, there being four different speeds, and also an arrangement for time exposures.

The "Fulvue" camera is provided with a rack and pinion for focussing, and is fitted with a focussing screen and hood,

so that when desired it can be used in the ordinary way on a stand. The back is reversible, and there is a rising front. This very ingenious little camera is made for quarter-plate only, is neatly covered in morocco-grained leatherette, and is provided with solid pattern double dark slides, with aluminium drawout shutters, and properly light trapped. It certainly provides well for the reflex worker of limited means.

The price of the "Fulvue," complete with three double slides and a symmetrical lens of 6in. focus, is £4 4s., or, fitted with a 6in. Ross rapid hand camera lens, £6 6s.



An Extraordinarily Portable Tripod—The Pocka.

QUITE the most compact thing in tripods which has ever come under our notice is the very cleverly designed one which is supplied by Messrs. J. J. Griffin and Sons, Ltd., of Kingsway, London, W.C. The whole thing is supplied in a neat case, which can be slipped into a hip pocket, since it measures no more than two inches wide, by five-eighths of an inch thick, and twelve inches long.

When the case is opened it is seen to contain three straight metal tubes lying closely side by side in a row, without an atom of waste space between them, and united at one end by a jointed piece which can be bent in two, so that, there-



after, the legs open out away from each other in the ordinary manner.

It is this folding of the top which is the keynote of the tripod's compactness. The legs themselves are in seven telescopic sections, each provided with a spring catch to prevent a section closing prematurely.

The tripod, which we had an opportunity of examining, was very well made and well finished. Although so surprisingly compact when closed up, it was firm and rigid when set up, and quite capable of carrying a quarter-plate camera of the hand or stand type. It opened and closed very smoothly. For a tourist or cyclist who has to keep down the bulk and weight of his impedimenta it seems to be just the thing; while it is equally suitable for a lady's use, since it is carried more easily than any other pattern with which we are acquainted.

The price of the "Pocka" folding tripod, complete in a neat carrying case, is 15s.

Illingworth's Cream Crayon Smooth Bromide Paper.

THE popular process of toning bromides by the Blake-Smith method has led to a greatly increased demand for cream tinted bromide paper, as the toned picture looks particularly effective when the paper itself has a slight cream tone in harmony with it. The Illingworth bromide paper has hitherto only been supplied, as far as the cream crayon grade is concerned, with a rough surface, but in future a "Cream Crayon Smooth" will also

be issued, samples of which we have recently had an opportunity of using.

The surface is a very agreeable one, and is smooth enough to keep all the fine detail in a small negative. The paper was of very good quality, and prints on it were most effective, whether toned or not. For portrait work in particular, it should be very popular.



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DON'T THROW THAT NEGATIVE
AWAY IN DISGUST!

THE NEW "VIGOROUS" CARBON

Nothing like it for
printing from very
THIN NEGATIVES:
renders vivid results
from the merest
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BEAUTIFUL MATT SURFACE.

JOHN J. GRIFFIN & SONS LD.
KINGSWAY, LONDON W.C.

TESTING SAMPLE.—We will send a packet of six $\frac{1}{4}$ -plate pieces Vigorous Art Velox with Developer, POST FREE, on receipt of 3d. stamp.

PLEASE MENTION "PHOTOGRAPHY" WHEN CORRESPONDING WITH ADVERTISERS.

The Watkins Time Developer with Thermo Indicator.

THIS developer, the characteristics of which we have already described in *Photography and Focus* (see May 12th, page 4), has now made its appearance on the market, and any reader can try for himself how simple it makes the process of development. There is no further need of any observation of the progress of development in the dim light of the dark room, with all its risks of fogging the plate. The light may be as little as one likes, or none at all if that is preferred, until the plate is immersed and covered over, and when that is once accomplished the light may be turned fully up, and the operation go on entirely by time.

In order that the temperature of the developer may be that of the dark room, Mr. Watkins advises that a jug or bottle of water should be kept in the room and used for diluting the developer, instead of drawing it from the tap just as it is wanted. To time development then, one turns up on the Watkins speed card the development speed of the plate. This is indicated by a letter. For example, a certain make of plate is marked "M.S." Now, "M.S." we see by the instructions stands for a plate which at 60° F. takes seven minutes for complete development in the Watkins developer. If the temperature of the dark room happens to be 60°, nothing more is needed, then, than to develop the plate for seven minutes. If the dark room is at any other temperature the proceeding is quite as simple. Taking the band which encircles the bottle of developer and twisting it round the bottle until 60° on the band comes against seven minutes on the label of the bottle, we can read off at once the time required at any other temperature. Thus, if our dark room is at 70° F. instead of 60°, we see at a glance that the time must be five minutes. On the other hand, were the temperature 50°, ten minutes would be required.

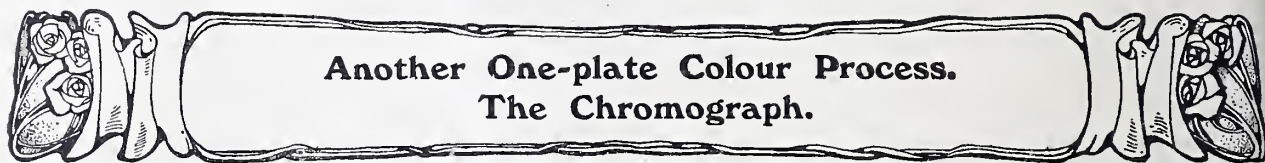
It is all beautifully simple, and what is still more important, it works. No matter how skilled the photographer may be, he will certainly get a better average of results in this way than he could hope to do by judging how far to carry development by holding up a plate and looking through it at a red light.

The method is equally applicable, of course, to stand or tank development. For this purpose the developer may be more dilute than the standard dilution of 1 to 8, as the quantity of developer required is generally a large one. The most convenient dilution, the instructions tell us, is four times the normal, or one part of the concentrated developer to 32 of water. The increased time with dilute developers is a little more than the increased dilution, and when the ordinary strength is diluted to four times, the time of development must be increased four and a half times.

The instructions state that this developer may be used for Autochrome plates by adding half a grain of bromide to the ounce. The time of development is then seven minutes at 60° F., but for the second development an amidol developer should be used.

We have already expressed our opinion on this real advance in photographic practice. It is a fitting corollary to the introduction of the Watkins meter, and does for development what that useful little tool does for exposure. It introduces simplicity, method, and accuracy, where hitherto many people have been satisfied with rule of thumb, guesswork, and irregularity. We have advocated the method for many years now. The first serious practical recognition of it was the Kodak machine. The second we deem to be the Watkins Time Developer.

The price of a bottle complete with the thermo-indicator is one shilling.



IT is claimed that a new colour plate, which has been worked out by F. Urban, is to give more brilliant and more faithful reproductions than have hitherto been possible. The description is translated in the "Scientific American" from the "Allgemeine Ingenieur-Zeitung," and somewhat condensed is as follows:

In the case of the "chromograph"—as the new plate is termed—there is produced a field composed of many spectra so infinitely small that the individual colours are not visible; it appears, in fact, as a simple white ground. If in parts of this surface certain colours in each of the tiny spectra are covered, these parts will appear tinged with that colour, or mixture of colours.

The spectra are produced by a grating and a medium which disperses the colours; this latter may be a simple prism. The net or screen is a photograph of a very fine and exact ruled grating. Before the image of the object to be photographed reaches the sensitive plate, the rays are refracted by the

grating, and are further dispersed by the colour-dispersing medium into spectra; so that the plate receives a picture composed of an infinite number of tiny spectra. If the apparatus is directed against a white field, each of these spectra will be perfect; if, however, the object photographed is coloured, the picture on the plate will contain only the colours of that object. Those portions of the small spectra which were of other colours will be dark.

The results with such a plate are, of course, negative, if the photographic image has not been reversed. Urban proposes to make a positive from the negative on lines which in the translation are not very clear, but which seem to be identical with the method employed with the Autochrome plate.

No details at present are to hand as to the method of manufacture; and on the face of it there is nothing to show why such plates, if it is possible to make them, should be any more brilliant than the various other screen plate results now in process of evolution.

THE RULES OF THE TITLE COMPETITION.

Coupon on page xii. Picture on page xxxviii.

(1.) All entries for the competition must be sent by post, addressed "Title Competition," The Editor of *Photography and Focus*, 20, Tudor Street, London, E.C., and must reach there not later than the first post on Friday, June 26th, 1908.

(2.) A competitor may send more than one entry, but each one must be on one of the forms, and must be accompanied by a postal order for sixpence.

(3.) Nothing but the entry form and the postal order may be enclosed in the envelope, and no correspondence can be entered into concerning the competition.

(4.) Late entries will be disqualified; the entry fees will

not be returned, but will be added to those of the next "Title Competition."

(5.) The awards will be made by the Editor of *Photography and Focus*, whose decision will be final.

(6.) No responsibility for missing entries or for entries which, from any cause, are not adjudicated upon will rest with the organisers of the competition.

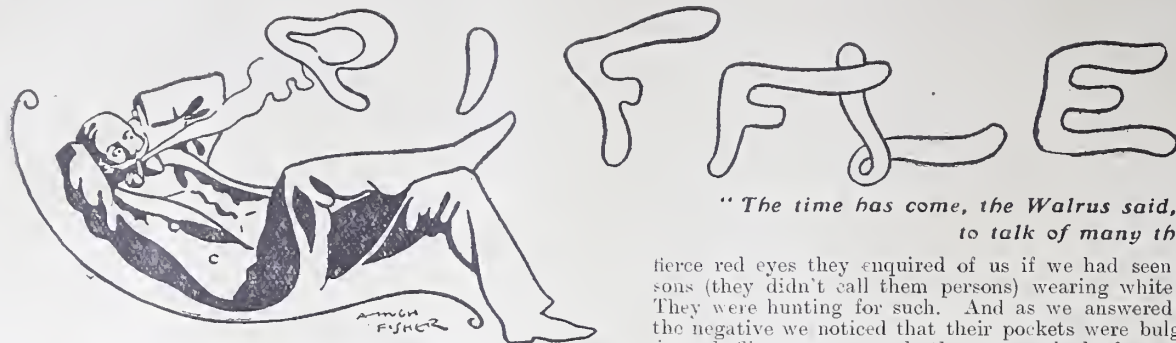
(7.) The prizes will be in cash. After deducting ten per cent. for clerical expenses, the entrance fees will be distributed as follows: One third of the amount will form the first prize, and the remaining two-thirds will be divided into separate prizes of (approximately) £1 each.

Wellington



Browne &

FOR CONTACT PRINTS
&
ENLARGEMENTS



"The time has come, the Walrus said,
to talk of many things."

fierce red eyes they enquired of us if we had seen any persons (they didn't call them persons) wearing white rosettes. They were hunting for such. And as we answered sadly in the negative we noticed that their pockets were bulging with jagged flint stones, and that some had sharpened their tripod points like needles. I am convinced that if a wedding party wearing white favours had happened along they would have been massacred to the last man before they could explain who they were.

* * *

Remembering that it was after all a photographic outing, and that I had two dozen plates, I seized every possible opportunity of making exposures, and actually managed to expose four plates. One was a cloud study. The other three were accidents. The only member of the party who found a really good subject was an indefatigable chap who came across a steam roller. Some people have all the luck.

* * *

A happy feature of the outing was the tea. I couldn't get any tea to drink, but I had four eggs. Three were good, and the other was given me by the editor. He had no use for it. Neither had I. There was no one in sight wearing a white rosette, or he would have had that egg. It possessed at least one of the characteristics of a lyddite shell. One optimistic individual declared that there was one thing to be said in praise of the meal provided—he had found that the salt provided was quite good of its kind.

* * *

There was a piano on the lawn in view of the after-tea concert that figured on the programme. But, although the piano still boasted a fair number of wires inside, there was only one performer courageous enough to play, and he was promptly mown down with a scythe that fortunately happened to be lying handy. I am an unerring mower.

* * *

As to the speeches that were made in the gloaming, I will pass them over in merciful silence, and only hope that some of the speakers may be forgiven for what they said. Their glowing testimony to the success of the outing was most affecting, and several fowls in the poultry yard were moved to tears. I must admit that personally I found the affair so pleasant and enjoyable that I hope to be spared to go again next year. But not to Ayot. Anywhere but there. No doubt it is a charming place, especially in those parts labelled "Trespassers will be prosecuted"; but I don't want to go there again. I really don't. I would rather go to Manchester. You can at least get good food there. But man cannot live by eggs alone, and so I flatly decline to join any outing that has Ayot for its objective. I understand now why a medal was offered to anyone that got a good picture there. It was a joke. But a jolly poor one. Nearly as bad as the editor's egg.

THE WALRUS.

SUBSCRIPTIONS.

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DURING the coming summer, if there is a summer coming, hundreds of photographers will be beguiled into going on photographic outings in company with other misguided members of the society to which they belong. This thought impels me to give a brief, more or less truthful account of the great combined outing of affiliated societies in and near London. I am the more disposed to do this inasmuch as there are already rumours of the experiment being repeated next year, and I feel it my duty to let others know what they may expect if they decide to go. My account should also be useful for purposes of comparison with what occurs at similar outings organised in the barbarous North and elsewhere.

* * *

I may say at once that I went myself, and am not evolving from my inner consciousness the description hereinafter set down. Others went also. They will probably remember doing so. There were in fact about a hundred photographers, several respectable persons, and an editor.

* * *

We were instructed to look out at King's Cross for a number of gentlemen adorned with white rosettes. These gentlemen were to be our guides. The nearest thing to the specification I could find was a girl with a red rosette on her waist-belt; and she didn't look like a photographer. She was, on the contrary, quite good looking. So a fair number of us went on alone by the first train, guideless but hopeful. We knew we had to change at Hatfield and go on to Ayot, and it says a good deal for our unguided and unrosetted sagacity that we actually arrived there.

* * *

In the road outside the station we stood looking helplessly at each other like a lot of benighted goats. The one that came nearest to knowing anything about the place was a middle-aged phantom who thought he remembered going to school some miles away. So when he turned to the right we all followed him. We learnt afterwards that we should have turned to the left. It is true that the road did ultimately lead us round to where we ought to have gone, but it went *via* Bristol, Southampton, Yarmouth, Newcastle, and Chester. It is a wonder we were in time for tea. No one should dream of taking the route we followed except a centipede. One pair of feet is no use at all. Personally I want a new pair of feet about every twenty or thirty miles, and I calculate that a centipede wouldn't be much more than a quadruped after the walk we had.

* * *

For the first two or three hundred miles we padded along cheerfully enough because there were rumours of a beautiful river somewhere over the horizon. I anticipated the Jordan, at least. But the one we at last came to was a poor affair. Following it for three thousand miles we arrived at some fairly promising country, and I was just contemplating making an exposure when a policeman appeared suddenly (I believe he crawled out of a rabbit hole) and ordered us away. We were in a private park. We had to walk round that park. It is about the size of France. To show the condition to which we were reduced we actually cheered up when someone said there was a church somewhere containing the tomb of a Crusader. I didn't find it, but I envied that Crusader. He was dead.

* * *

As we hobbled on, lame and dusty, through county after county, we at last began to meet straggling members of the party who had come down by the second train. With

PHOTOGRAPHY. JUNE 23RD, 1908.

PHOTOGRAPHY

A JOURNAL FOR EVERY CAMERA USER.

EDITED BY R. CHILD BAYLEY.

PUBLISHED WEEKLY.

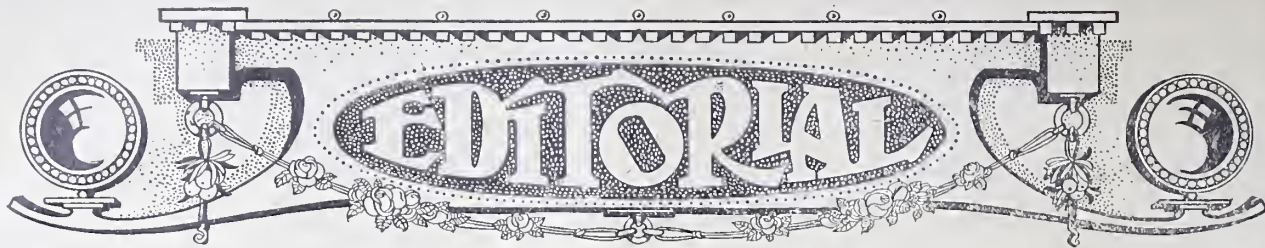
JUNE 23RD, 1908. TUESDAY. No. 1,024. VOL. XXVI.



OLD DICKIE.

BY THOMAS STEVENSON.

Awarded the Silver Plaque in the Advanced Workers' Competition for May.



Our Summer Number.

A fortnight to-day will be published the special summer number of *Photography and Focus*. No increase will be made in the price, which will remain at the humble penny, but that pennyworth will be a remarkable one. Next week we shall give a list of some of the contents which will go to make what will, we hope, be a record issue in photographic journalism. For the present we will let this note suffice as a reminder to our readers to be careful not to miss our issue of July 7th.

The Approaching Holidays.

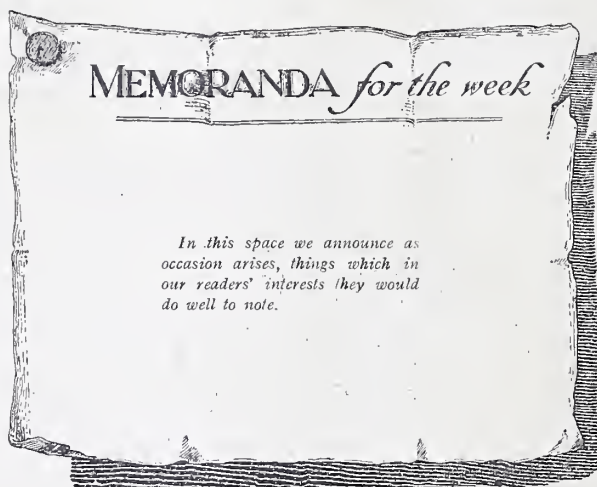
Thousands of the readers of *Photography and Focus* must be thinking daily of the summer holiday, which is getting nearer and nearer. The problem "Where to go" is one which each must solve for himself. One man can no more choose a holiday spot for another than he could choose a wife or a book, but he may help him to a decision. The problem is more important to the amateur photographer than to most people, for the annual holiday is to many the one great chance in the year to make negatives—negatives that are to provide occupation in the shape of printing, enlarging, and slide-making for the spare time of a twelvemonth.

Some help we hope to provide in the summer number, which will specialise on holiday information and holiday articles. In the meantime, we would point out that the landscape worker in this country has at least the advantage that, no matter where he may be, the most beautiful scenery he could desire is within easy reach. The tens of thousands of camera workers in Lancashire have North Wales, the Isle of Man, and Derbyshire positively hemming them in with material for their exposures. Yorkshire, in like manner, has magnificent coast scenery on the one hand and its wild moorland extending towards the lakes on the other. The Glaswegian has more than his share of most of the good things going, and the matter of natural beauty is no exception, while the Tynesider, not to mention the atmospheric effects of his own river in its lower reaches, has all the wild border country and the lovely river valleys of Northumberland close by. The South of England in this respect is less favoured than the rest of the country, but we at least have Surrey and

the Thames Valley and estuary, to say nothing of the facilities for getting far away at little cost either of time or money.

A holiday devoted to landscape work can hardly be better spent than within the limits of the United Kingdom, but if general hand camera work is in view—figure studies, quaintness of architecture or of costume, and topographical photographs generally—then the Continent will be found studded with happy hunting grounds. Those who have never been abroad before will do well to try Belgium as a start. They are not likely to get where English is not understood, while the Belgian not only welcomes the tourist, but

lets him down very lightly in the matter of expense. Many a comfortable inn in the Ardennes and Luxemburg districts is content with five shillings a day for board and lodging—too, that is by no means to be despised. Normandy and Brittany, Holland and Norway, are also capital places for the hand camera. Some of the yachting trips to Norway in particular are exactly what the camera worker would wish. His baggage goes with him in a floating hotel, the language difficulty does not exist for



him, and he can tell to a fraction before he starts what his trip is going to cost him. Sea sickness is not likely to be a trouble, as, except for the forty hours or so crossing the North Sea, the whole of the trip is in the calm land-locked waters of the Fjords. But let us add one word of caution: take plenty of plates (twice as many as one thinks can possibly be necessary), or will come back full of sadness at the thought of good things missed.

Photography at the Franco-British Exhibition.

Some of the statements which have appeared in the press on the subject of the Franco-British Exhibition and the photographic possibilities thereat are of a most misleading character. A correspondent sends us some cuttings, and asks us for an explanation. The reply is a very simple one. Photography within the exhibition boundary is prohibited entirely unless the amateur has obtained permission, which permission is only granted in special cases. Any cameras that are being carried in are stopped at the turnstiles; and the only work we have seen up to the present, except the official photographs, has been obtained by means of pocket

cameras and the like. We believe that there is just a possibility that at some future date the restrictions may be withdrawn, but until they are—a fact which our readers may be sure will be very promptly notified in *Photography and Focus*—it would be wiser, and save possible annoyance, if the camera were left at home.

Method.

Anything that is done repeatedly is soon done more or less automatically. Every photographer who has exposed many Autochrome plates must have found himself once or twice on the point of putting the plate upside down in the dish, due to his habit of turning a plate over as he takes it out of the dark slide. In the same way, it is well to accustom one's self to a certain definite arrangement of the dark room bench, dish here, fixing bath there, measure on this hand, cotton-wool on that, and so on. If this is persevered in, one soon becomes almost independent of the light, placing one's hand immediately and without thought on whatever is wanted.

The Work of Clarence White.

The latest copy of "Camera Work" to come to hand beats all its predecessors in its illustration. Sixteen whole-page photogravures on Japanese paper reproduce the cream of the work of Clarence White, and show that in that member of the Photo-Secession we have one of the most original and gifted artists who have chosen the camera as their tool. Much of it will be "caviare to the general," but such pictures as "Morning" and "Lady in Black with Statuette" must appeal to all with any sense of the beautiful in line or in tone, and the portraits are also likely to have many admirers. Most of this work, if not the whole of it, is not known to the British photographer at all. It is a pity that

a representative collection could not be arranged for one of the galleries at the Royal Exhibition, that are generally occupied by an uninteresting and sparse gathering of professional work. In the meantime, let us add that the copy of "Camera Work" is a gallery in itself, and those who can get a glimpse of it should certainly do so. We presume there is a copy at the house of the Royal Photographic Society, at 66, Russell Square, Bloomsbury, W.C.

TO MY SHUTTER.

O, most unworthy piece of mechanism!

How oft have I been taken in by thee,
When, with a far too trustful optimism,

I thought thy speeds were what they claimed to be,
Nor, till a test had shown it otherwise,
Did I believe thou might'st be telling—fibs.

How often hath thy surreptitious closing,

All silently performed, escaped remark,
And plates, which I believed I was exposing,

Offered their virgin surface to the dark!

And I have sorely tempted been to swear,
Trying to develop that which was not there.

How oft, again, when I have pressed the trigger,

Thou hast determined open to remain,

And I have fancied that I heard thee snigger,

Whilst I have squeezed the rubber bulb in vain,

Perspiring as I thought upon the fate

Of my ten-thousand-times-exposed plate!

Too long I've borne with thee, disgraceful shutter!


No longer shalt thou laugh behind my back.

No more anathemas my lips shall utter,

But I will wedge thee open with a tack,


And all too late thou shalt repent, mayhap,

When I discard thee for a simple cap!



Forthcoming Events

Societies will have their meetings announced here if the syllabus is sent to us at the beginning of the Session or from time to time.



TUESDAY, JUNE 23RD.

Wallington C.C. Short Papers by Members.
Nelson P.S. L. and C.P.U. Excursion.
Batley and D.P.S. Knaresborough.
Paisley Philosophical Institution. Dougalston Lock.
Hackney P.S. Hand Cameras.

WEDNESDAY, JUNE 24TH.

Bolton A.P.S. Borsdane Woods.
Windsor P.S. Portkerry.
North Middlesex P.S. Affiliation 1907 Prints.
Rugby P.S. Grandborough.

SATURDAY, JUNE 27TH.

Lincoln A.P.S. Stow and Coates Churches.
South Suburban P.S. Oxshott.
Batley and D.P.S. Heath Hall.
Central Y.M.C.A. P.S. Herne Hill.
Liverpool A.P.A. Ludlow.
Coventry P.C. Sutton Park.

SATURDAY, JUNE 27TH (continued).

Bristol P.C. Bath.
Edinburgh P.S. Dunfermline.
North Middlesex P.S. Denham.
Wallasey A.P.S. Barnston.
Blackpool and Fylde P.S. Poulton and Singleton.
Boro. Poly. P.S. Rickmansworth.
Southend-on-Sea P.S. A Trip in a Leigh Bawley.
Hackney P.S. Otters Pool.
Chelsea and D.P.S. Heston and Hounslow.
Ashten-under-Lyne P.S. Moberley.
Woodford P.S. Down the River in a Tug.
Horwich I.A.P.S. Bakewell.
Stockport P.S. Moreton Old Hall.
Dennistoun A.P.A. Clyde Yachting at Hunters' Quay.
Watford P.S. Chesham.
Southampton C.C. "Art in Photography." C. Daw.

MONDAY, JUNE 29TH.

Bournville and D.P.S. Camp Wood, Bournville.
Bradford P.S. Hirst Wood.

Societies will have their meetings announced here if the syllabus is sent to us at the beginning of the Session, or from time to time.

PLATE SPEEDS.

An Elementary Article on a very Current Topic.

It is easy to be misled by speed numbers on plate boxes. Properly understood they are very useful. This article tells what they stand for and how to use them. Incidentally also it tells how the speed numbers in one system may be translated into the speed numbers in another.

THE practice of marking various "speed numbers" on boxes of plates is getting more and more the custom, and the beginner may well look at these marks, and wonder how he is to use them to the best advantage.

Speed numbers may easily be misleading. Too much importance may be attached to them. The photographer very naturally would conclude that a plate marked with a higher speed than another was more suitable for work where very short exposures were compulsory, but it might not be so in practice. The old hand uses the speed numbers on the box when finding out the exposure, but he never thinks of getting a plate marked 180 instead of one marked 140, because the former is faster than the latter. He knows that the difference represented by these numbers is too little to be detected in practical work at all. He uses a make of plate to which he is accustomed and sticks to it, and if it is one of the standard brands, although different boxes of that brand may bear different speed numbers, he knows that from the user's point of view the speed of the brand is virtually always the same, and may be treated as such.

As years roll on, the tendency of the standard brands of plate is to get faster. There is probably no plate to-day, hardly, that is not perceptibly faster than the plate of the same name that was made three or four years ago, but this has been attained by quite imperceptible stages, and any-

one using a few of the plates every month would not notice the tendency, but would unconsciously have altered his exposures in the light of the experience gained from time to time.

The advice to be given to the photographer, therefore, is "Do not be influenced by the speed numbers on the boxes in buying plates. Buy plates of one make and stick to them until you can make perfect negatives on them. But if you use an exposure meter of any kind, then the speeds may be taken as a guide in doing so."

There are three well-known systems of marking plate speeds—the Hurter and Driffeld, the Watkins, and the Wynne. If the box bears such an inscription as "H. and D. 150," that means that the speed of the plates within it

is 150, calculated on the method laid down by Messrs. Hurter and Driffeld, who were the pioneers in this work. A little exposure calculator, sold by Messrs. Marion and Co., called the Actinograph, gives the exposures for different subjects at different times, but it has never attained the popularity of either the Watkins or the Wynne. Still, more plates have their speeds marked in the H. and D. method than in any other, because it is the plan which is employed in the plate factories for measuring the speeds, and because when the H. and D. speed has been ascertained the speeds according to other systems are easily calculated from it.

By the H. and D. system the higher the number the faster the plate. "Ordinary" plates usually have an H. and D. speed of from 50 to 100; anything over 100 would be a fast plate, while from 200 to 300 would be an extremely rapid plate. The exposures needed are "inversely proportional" to the speed numbers. That is to say a plate marked 100 is twice as fast as one marked 50, and so needs half the exposure. One marked 200 needs half that of one marked 100, and so on.

This may seem to be what Sam Weller called a self-evident proposition, but there are systems of plate speed measurement in which this is by no means the case.

Another form of plate speed given on the boxes is such an inscription as "Watkins 100." This means that when the Watkins meter is being used 100, or whatever it may be, must be taken as the speed number. In this system also the same rule holds good, that the faster the plate the higher the number which indicates its speed, and the exposures are "inversely proportional" (for the meaning of this phrase, see the previous paragraph) to the speed number. The Watkins speed of a plate, if it is not actually marked on the box, may be taken as twice the H. and D. speed, so if the H. and D. number is given, we double it to get the Watkins number, or halve the Watkins number to get the H. and D.

It may happen that the Watkins speed given on the card sold for use with the meter is not exactly double the H. and D. number that is given on the box of plates. The difference may not be very great, certainly not great enough to have any appreciable effect on one negative, and it does not matter, therefore, which indi-

cation the photographer goes by. The difference may be due to different methods of calculating the speeds, and we must always bear in mind that at present there is no method which will give the rapidity of a plate as definitely as, for example, a good thermometer will give the temperature of a room. The problem of speed measurement is not so simple as it seems.

The third method is the Wynne. Sometimes this is marked on plate boxes as an "F" number, thus "Wynne F/64," sometimes simply as "Wynne 64." In either case the meaning is the same. We can ignore the "F," and call the Wynne speed 64. The Wynne speeds are provided for use with the Wynne meter, sold by the Infallible Exposure



A Country Cottage.

By J. R. Greenhalgh.

Meter Co., of Wrexham. In this case also, the faster the plate the higher the speed number, but the rule as to exposures being "inversely proportional" to the speed numbers no longer holds good. That is to say, a plate marked "Wynne 32" is not twice as fast as one marked "Wynne 16," but is four times as fast. This is in no sense a complication, as if the Wynne meter is used the speed numbers are fitted to it, and if it is not used the Wynne speed is simply ignored.

This peculiarity of the Wynne speeds makes this one difference, that the Wynne speed is not calculated quite so easily from the others as the Watkins is from the H. and D. or *vice-versa*.

It is not difficult, however, although the relationship of the numbers is not so directly visible. To get the Wynne speed from the Watkins, we halve the Watkins speed, multiply the result by 64 and take the square root. To get the Wynne speed from the Hurter and Driffield speed, we multiply the Hurter and Driffield by 64 and take the square root. To get the Hurter and Driffield speed from the Wynne, we square the Wynne speed and divide by 64, while by doubling the result so obtained we get the Watkins instead of the Hurter and Driffield speed numbers.

Owing to differences in the manner of testing, the H. and D. speeds of one maker are not comparable with those of another. Thus we may have two different makes of plate both marked say "200 H. and D.," yet one may be much

faster than the other. On the other hand, if two plates by the same maker are marked respectively "100 H. and D." and "200 H. and D.," we may rely upon the latter requiring half the exposure of the former.

The real use of a speed number on a box of plates, it will therefore be seen, lies in its employment with a suitable exposure meter, and the photographer who wants to work economically will find that he must use one or other of these useful little machines. To save calculation, the following table is quoted from Mr. Sterry's admirable little beginner's guide, called "Photography by Rule." It shows the relationship between the three kinds of speed numbers usually met with. The numbers in the same horizontal line show plates of the same speed as described by the different systems :

H & D.	Watkins.	Wynne.	Plates.
256 ...	512 ...	128 ...	Extra rapid
192 ...	384 ...	111 ...	
128 ...	256 ...	90 ...	
96 ...	192 ...	78 ...	Rapid
64 ...	128 ...	64 ...	
48 ...	96 ...	55 ...	
32 ...	64 ...	45 ...	Ordinary
16 ...	32 ...	32 ...	
8 ...	16 ...	22 ...	
4 ...	8 ...	16 ...	Slow
2 ...	4 ...	11 ...	
1 ...	2 ...	8 ...	
$\frac{1}{2}$...	1 ...	$5\frac{1}{2}$...	Lantern



WESTWARDS.



The Speculator and the Shadow.

By Frank M. Sutcliffe.

NOW that so much of what makes the country desirable and beautiful is disappearing, it may be worth while to ask why its beauty has not

disappeared before. On all sides we find old lanes being robbed of their charm, by the hedges being cleared away and iron rails or "railway

fencing" put in their place. We also see trees cut down to such an extent that the country where they were seems almost unrecognisable. We find houses which look as if they have been expelled from some town rather than having come naturally and grown on the land.

When we do find the country yet unspoiled, and we begin to enquire the reason why it is so, we learn either one of two things—that it is owned by some person or



THE SPECULATOR
AND THE SHADOW.

persons too poor to waste their money on so-called improvements and model farming, or that the country for miles round belongs to some rich person of taste, who looks upon his heritage as one vast picture, and who will not allow any alteration to be made without his permission.

If only the whole country could remain in the hands of the very poor or the very rich with taste, we should have nothing to complain of. Unfortunately, that angel of darkness, the speculator, comes in and tempts the landowner. Now speculators care nothing for hedges nor honeysuckle, trees nor singing birds, old cottages, nor thatched roofs. No! They simply look on the land they buy, no matter how beautiful it may be, as something to turn into money. If they can sell the old lanes to the district councils they do so, trees they cut down wholesale and sell as timber or firewood. When they have made the land as bald as a robin they form a building syndicate, and they get a lot of foolish people to lend them money to build villas, which people would not live in if they could live elsewhere. This kind of thing is going on all over the country, and the speculator is spoiling what beauty has been left to us; and there is no one to say him nay.

The illustration, printed with this, is on an estate near Whitby which is not likely to come into the speculator's hands. The cottages will have their thatched roofs repaired at great expense. (For the speculator, and his friend Jerry, have killed the thatcher in most parts of the country, and it costs more now to have a house thatched than to have it slated or tiled.) There is no fear that the trees will be cut down till old age makes them dangerous; and then there

is a well-stocked nursery kept on purpose for filling up gaps. I would ask the reader to look at the photograph. There is very little in it; but let him imagine the possibility of the speculator, and see how he would ruin what little there is. The trees would come down most certainly; then there would be another storey added to the houses and bay windows put out; slate roofs and cheap ornament would be sure to crown the "improvements"; corrugated iron roofs would be put on the out-buildings; and the speculator would congratulate himself, and be congratulated, on how much good he was doing. As for you and me, reader, our poor cameras would find no food, and we should have to follow the birds, who once nested in the thatch, and go elsewhere.

Does the reader see the difficulty which the photographer had with this photograph?

It was of no great importance, yet until it was over-come, no plate could be exposed on the subject. We were living in a cottage one summer, which overlooked the trees and thatched roofs. These often enticed me to bring out my camera; but no suitable point of view could be found, for the long straight wall spoilt everything, till one morning when I was out of bed earlier than usual, or later than usual, I noticed that the long wall was broken in a most pleasing way by the shadow of a tree on the other side of the road. It did not take long to get the trees, cottages, shadow, and all.

I have often wondered since if anyone who had not seen this identical shadow could have imagined it of such a graceful shape where it ends on the wall.

Had the speculator been that way even the shadows would not have been there.

Temperature and P.O.P.

Important if Spoilt Prints are to be Avoided.

VARIABLE as is the weather of this country, the Editor of *Photography and Focus* may perhaps be tempted to allow me to utter a few words of caution with reference to hot weather and the use of P.O.P. True we had a snow-storm only a few weeks ago, but we may have a heat wave to-morrow, so it is well, if any warning is to be given, that it should be given in time.

While temperature is said to be an all-important matter in the development of plates, its influence on the manipulation of P.O.P. is not often referred to. Yet if the work is to be done properly and economically, if the prints are to be toned uniformly, and are to pass through the various solutions unscathed, we must pay attention to the temperature of those solutions.

Cold weather has one good effect as far as P.O.P. is concerned, and that is that with cold solutions the gelatine is much less likely to be softened and so damaged than it is in warmer ones. Unfortunately, however, this advantage is

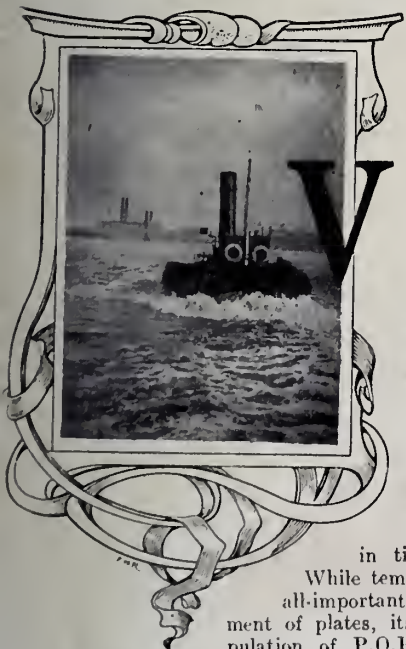
accompanied by the drawback that both toning and fixing take longer, especially toning. In fact, some toning solutions appear to be unusable at a temperature much below 55° F.

Hot weather means, generally, that the toning bath will work more quickly; so that if we are not careful we may have trouble from uneven toning. This can be remedied by adding more water to the bath, until it works at a comfortable rate. It will, perhaps, be found in very hot weather that the prints feel soft and greasy to the fingers. This is a sign that the temperature is too high for the gelatine coating. There is no better preventive of trouble on this score than the preliminary alum and salt bath, which is given in the Ilford instructions. The prints are placed in water for a minute or two, and are then transferred to the following solution, in which they are kept for five minutes:

Alum	...	...	...	...	1½ ounces
Common salt	...	...	...	...	1 ounce
Water	...	...	...	...	20 ounces

They are then washed as usual and toned. This bath not only hardens the gelatine, but greatly facilitates stripping, if the prints are subsequently to be squeegeed down.

Blisters, which used to be so troublesome in hot weather, are not so frequent now, but they may be met with. The best way to prevent their appearance is to be careful to use solutions and washing waters of the same temperatures. If hot water has to be used to dissolve any of the ingredients, these solutions should be made up on the previous day, so as to give ample time to cool down. Hypo solution should always be made at least a day before it is wanted, whether made with hot or cold water.





A CRITICAL CAUSERIE.

By "The Bandit"

Concerning some Photographs by Beginners.

*"Critics I—appalled I venture on the name,
Those cut-throat bandits in the path of fame."*—BURNS.

"IN Dhoon Glen" is an extraordinarily good example of what I call a ready-made view. It is one of those views towards which signposts wave eager arms, which guide books allude to as "romantic," and to see which, in the Isle of Man, you have to pay threepence. Nature is exploited thus in many tourist centres of Switzerland, where rock and valley scenery is somehow made to look so artificial that instead of enjoying an open air sensation you keep tapping the precipices to find out whether they are pasteboard, and looking round for the limelight man. Indeed, so easy is this sort of alleged "romantic" scenery to imitate, that we find examples of it, built of lath and plaster, at metropolitan exhibitions and "Dioramas," where the whole business is reproduced with quite amazing fidelity by the craft of the stage carpenter; the waterfalls being turned on and off, at will, by a concealed plumber's apprentice. The sole flaw in the illusion is that caused by the raucous voice of the man at the turnstile entrance, who shouts, "This way to the Sunset in the Alps, ladies and gentlemen. No waiting!"

Now the fact that there is no waiting at ready-made views (I mean real ones, not Earl's Court ones) is their

first weak point. Their second weak point is that there is no seeking for them. You find them all ready to fit your eye, just as you find a suit in a slop-shop ready to fit your body. The slop suit is somebody else's idea of what you would like to wear; and the ready-made view is somebody else's idea of what you would enjoy looking at. It is true that one can gain pleasure from somebody else's idea of the beautiful. One can enjoy somebody else's picture, or somebody else's ballet or play. But if I took my camera to the Royal Academy or to the Gaiety Theatre, and there exposed it on a picture or on a play, would there be any merit in my photograph?

There would be technical merit in getting it rightly exposed; indeed a snap of a dance in "Havana" would be a miracle of technique if it showed any detail at all! But that is by the way. Would there be any merit in the choice of the subject, in the composition? Would there be anything of ME in the

photograph? Not much. And similarly, in photographs of ready-made views, there is nothing of the photographer. And if there is nothing of the photographer in a photograph, then that photograph is worth—precisely nothing.

The man who took "In Dhoon



Irish International Exhibition at Night.

By John Ardagh.

Glen" did not choose the picture. The owners of Dhoon Glen chose it for him—and for thousands of other patrons, as the presence of the stairway signifies. They said, "This is a Waterfall. This is a Gorge. This is pretty." And, very meekly, the photographer took the hint—and the Waterfall and the Gorge, and the "Prettiness." There was "no waiting." It was all spread in readiness for him, the moment he arrived. The Gorge was there and the ferns were nicely growing, and the waterfall was switched on and the staircase rail was strong enough to prevent him tumbling into the pool; and thanks to the well-trodden path there was no possible chance of his wandering astray and finding a view for himself. In short, this is a ready-made view, and as such is as much credit to the photographer as a ready-made suit is to its wearer. The photographer paid for his camera, and the wearer (let us hope) paid for his suit. Here their responsibility ended.

Do you agree with my tirade against ready-made views? I hope you do, because if you don't, then the drift of the majority of my Causeries must seem peculiarly aimless. Originality—that is what I am perpetually harping on, because lack of originality mars nine out



"The House."

of ten of the Beginners' prints which I criticise. Technically, they are admirable (as is "In Dhoon Glen"), but they go no further than that; and really, the practice of photography is so



In Dhoon Glen.

By Fred Littlewood.

ridiculously easy in these days of Watkins meters and machine development that to discourse of technique is a weariness of the flesh to the critic.

Yet even a ready-made view can be treated in such a way as to be infused with the personality of the photographer. Look at "The House." Here is a ready-made subject if you like—a subject the interest in which is specific and outside the photographer's control. The House of Commons is important not because of the photographer's picture of it, but because it is the House of Commons. Nor did the photographer make its architecture beautiful. The architect did that. Nor did the photographer choose its position on the river. All these were chosen for him. The subject was as ready-made as Dhoon Glen. Nevertheless, it differs from Dhoon Glen in this respect: it has no rail to prevent you falling into the pool or looking at the "view" from the "wrong" viewpoint. The photographer of "The House," has, as it were, deliberately chosen to fall into the pool and thus select his own unconventional viewpoint. While everybody else went and looked at St. Stephen's from the nice front aspect, where none of its beauties were obscured, he jumped the fence

and found a place where cheeky factories poked their noses in and hid a portion of the fine skirts of their splendid neighbour, and where the steam of plebeian toil veiled some of the detail of the building whose existence makes that plebeian toil possible. Thus he has produced a picture. It may not be a masterpiece; but it at least has meaning, which "In Dhoon Glen" has not.

Here is another ready-made view, "Irish International Exhibition at Night"—a remarkable sight, well seen

It is no *tour de force*. But it is not ready-made. It is the discovery of the photographer, and is, therefore, the photographer's creation from beginning to end. It was ready-made in an extreme sense—the road was there, the hillside was there, the shadow was there (or perchance it wasn't there, and there was "waiting" till it came!)—but all nature is ready-made for the photographer in these senses. Dhoon Glen and St. Stephen's and the Irish Exhibition illuminations were ready-made in an utterly different sense.



Sunshine and Shadow.

By H. Brierty.

and well rendered, and no doubt in its way an interesting memento. I class it higher than "Dhoon Glen," because it is plainly a personal choice of the photographer's. He saw that the lit-up building was fine, and he chose to make a registration of its fineness, without, so to speak, being told to make it. But this Irish Exhibition memento is still in the same category as Dhoon Glen, because it is ready-made stuff; and so, while a praiseworthy piece of work, it misses being "Art."

Now look at "Sunshine and Shadow," and compare it with the views which were ready-made, and for which there was no waiting. I am ready to grant that "Sunshine and Shadow" is pictorially not brilliant.

"Sunshine and Shadow" the photographer literally invented. He built that picture, on his own plans, and to fit his own idea of the beautiful, as truly as if he cut the cart tracks and carted the soil and turf to make the hill. The chances are millions to one that nobody else has made a picture out of precisely this scene; whereas the chances are millions to one that every camera which passed through Dhoon Glen made a snap of that waterfall. Roughly speaking, that is why, if I were awarding prizes for the four pictures reproduced this week, I should give the first to "Sunshine and Shadow," the second to "The House," the third to "The Irish Exhibition," and the fourth—No, I'd hold over the fourth for another week.

Extracting the Silver from Old Hypo Baths.

OLD hypo baths are rich in silver, and anyone who photographs on a large scale would find it pay him to extract the silver in the form of sulphide, and send it to the refiner. When enough of the baths has been collected, potassium sulphide, or "liver of sulphur," should be added so long as its addition causes any further black precipitate to form. A little too much does no harm. This precipitate,

which is silver sulphide, may be collected and dried, and when enough has accumulated it may be sent to the refiner.

When potassium sulphide is not obtainable, it can be made by fusing together in a crucible four ounces of sulphur and one pound of carbonate of potash. When melted it is poured out on to a slate, and broken up and kept as soon as cold in a well-corked bottle.



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H. H. (Leyton).—Full information as to the "Cornex Index" can be got from the makers, Messrs. E. and J. Beck, 68, Cornhill, E.C.

D. D. (Broughty Ferry).—There are no special restrictions upon photography in London, provided the traffic is not interfered with.

W. MCWILLIAM (Southall).—We do not recognise the formula, but it could not work as it is at present. It would need two ounces of sodium carbonate (crystals) in B in addition to the other ingredients, and then should make a good developer.

COLENSO (Hammersmith).—The camera presumably does not rack out far enough to allow half the lens to be used. It must be extended, approximately, to twice the distance required by the complete lens. Many thanks for kind congratulations.

A. BLAKE (Winchmore Hill).—J. A. Sinclair and Co., 54, Haymarket, S.W., make a feature of such outfits, and your best plan would be to call there, discuss the matter with them, and be guided by their advice. We do not think metal would be satisfactory, and plates rather than roll or cut films should be used.

CHALLENGE (Largs).—Neither films nor developer have anything to do with it, in our belief. It looks as if the shutter lets in light, which slightly fogs the plate all over except in the dark patch. The cause, we believe, lies there or in something similar. Perhaps, having given you a clue, you will be able to trace it.

J. L. SMITH (Kensington).—We do not care to advocate special developing formulae, holding that it is best to employ those given by the makers of the plates. We use the tank ourselves, and employ the makers' pyro-soda formula in it in each case. The time must be determined by experiment, as it varies with different makes of plates and formulae.

F. I. WATSON (Anerley).—A condenser is not a necessity if a white reflector is used and no direct, unreflected light allowed to reach the negative. But if the enlarger is only for quarter-plate or thereabouts, the condenser is well worth the comparatively slight extra expense, as it shortens the exposures by eighty or ninety per cent. at the least.

CRUCIBLE STEEL (Sheffield).—Probably your prints were not fixed before you attempted to tone them. A saturated solution is made by adding alum to boiling water until it will dissolve no more, and then allowing this to get cold. Some of the alum will then separate out; the liquid forms a saturated solution. There is no need to weigh out the alum.

CLINCHER (Madron).—The negative is too fogged for us to say whether it is fully or underexposed. Either the light in the dark room or the developer is at fault. These must be modified until you can get the edges where they are protected by the sheaths almost clear glass. Then send us another plate and we will advise further. We suspect the developer is too strong.

W. H. D. ACLAND (Oxford).—The best of the simple sensitisers for the purpose would probably be erythrosin. Orthochrom T also might be tried, but its action goes further, and that, we presume, is not wanted. If only relative sensitiveness is needed, a slow plate of the lantern type would be best, but if the utmost speed is wanted the dye must be applied to a plate of the Imperial Special Rapid type.

W. E. TOLL (Cape Town).—The wave pictures are very interesting, and we should think would stand a good chance at a local exhibition. The principal fault we have to find with them is that they are crowded on to the plate too much; they would have been better to have been a little further away. The usual faults are just the opposite to this, and underexposure, which latter also you have avoided very well.

ILEX (Upper Norwood).—We do not think it is the lens, but suspect some bright reflecting surface in the camera, or possibly on some part of the shutter. It would be well to see the makers, we think. You might try to hunt for it, by opening the back, removing the sheaths, muffling up your head and the back with a perfectly opaque cloth, and examining the camera in strong sunshine, working the shutter once or twice.

LANTERN (Repton) asks if there is any way by which lantern slides can be made by taking the gelatine film off a print and transferring it to glass. A.—There used to be a special P.O.P. "Novitas" made for this purpose, but we have heard nothing of it for a long time. It would not be possible with ordinary P.O.P. In any case a much more vigorous picture than is needed for a print would be necessary if it were to be seen as a slide.

WELSHMAN (Newport).—The reply is in the affirmative.

CLOTHES-HORSE (Westgate-on-Sea).—Our own preference is for the tabloid sodium formate bath.

H. LEIGH (Leeds).—It is not in any of our lists. Fallowfield, 146, Charing Cross Road, London, W.C., supplies all ferrotype materials.

HARRY WYNNE (Ruabon).—A line to the secretary, 66, Russell Square, Bloomsbury, London, W.C., will bring you full particulars.

W. J. S. (Chatham). J. MCGILL (Paisley).—We have sent your letter on to the late publishers of *Focus* for attention. Many thanks for the P.S.

M. BOLTON (Muswell Hill).—We have a sufficiently high opinion of our readers to believe that the "best" features of the paper are the "most popular."

H. W. T. (Northwold).—The air bells which you see in the glass of your lens are inevitable in all the best lenses. They will not affect its working in any way.

A. G. BIRD (Victoria Docks).—It may be due to insufficient washing before toning, or else to impure chemicals. Excess of sulphocyanide sometimes causes it.

F. B. (Failsforth).—The cause was that the daylight enlarger was turned direct to the sun. Another time send your name and full address, see the rules above.

MORGAN (Aberdare).—There will be no perceptible distortion over the field which the lens is sold to cover, but if you go outside this, then distortion may be noticeable.

R. ALLEN (Hope).—Many thanks for your letter. We were not aware of the information it contained, and are sorry to hear that what seemed a promising material should be unavailable.

VALUE (Boscombe).—Half-a-crown apiece is about the market price for such things. We have returned the print, and are very glad to hear you find the paper so useful. Many thanks for your good wishes.

J. W. MAWDSLEY (Goantrey).—Sorry we can make no exception to our rules, which you appear to have overlooked. Travel photographs are not very marketable, but a small advertisement in our columns might find a purchaser. We know of none.

TEE CEE (Finsbury Park).—The camera has not been held steady in any case. This is a thing which is very likely to happen, when going from one of the ordinary patterns to a reflex camera.

BROMIDE (Bristol).—Your friends are right in saying that a fairly thin negative is required for bromide printing; but the dealer may also be quite right in saying your negatives are not plucky enough. He has seen them, we presume, and he ought to know.

H. A. (Edinburgh).—Multiply the number of grains of metal by the factor for metal, and the number of grains of hydrokinone by its factor. Add the two results together and divide by the sum of grains of metal and hydrokinone. Result we make approximately 19.

ALEXIS (Belfast).—We do not give the addresses of our contributors, but any letter sent under cover to us will be sent on, provided the postage is paid. Some of those who write omit this latter ceremony, and such letters are destroyed. We have no recollection of your note, but perhaps it was one of these.

D. SCOTT (Westcliffe-on-Sea).—We got one from Messrs. Nurse and Co. in Fleet Street, just out of Ludgate Circus, E.C. Many thanks for your letter, we hope to keep your good opinion. We understand that there is a possibility of the matter to which you refer being altered in some ten months time, but it cannot be done before.

G. E. MACKLEY (Leicester).—Something must be radically wrong with the iodine solution. It ought to be a very dark brown colour, and should be left undisturbed until the lettering is bleached quite white, when the hypo may be applied. We note your remarks; perhaps an alteration may be possible in a few months, we cannot say more.

P. HITCHCOCK (Taunton).—Many thanks for the letter and cutting, which we must confess we do not understand. We are also obliged for your suggestions, all of which will have careful consideration. We always feel indebted to readers who manifest their interest in the paper by a letter such as yours. If we do not act on the suggestions, it is only because there are other factors to be considered of which the writers may be unaware.

THE RULES OF THE Coupon on page x.

(1.) All entries for the competition must be sent by post, addressed "Title Competition," The Editor of *Photography* and *Focus*, 20, Tudor Street, London, E.C., and must reach there not later than the first post on Friday, June 26th, 1908.

(2.) A competitor may send more than one entry, but each one must be on one of the forms, and must be accompanied by a postal order for sixpence.

(3.) Nothing but the entry form and the postal order may be enclosed in the envelope, and no correspondence can be entered into concerning the competition.

(4.) Late entries will be disqualified; the entry fees will

TITLE COMPETITION. Picture on page xii.

not be returned, but will be added to those of the next "Title Competition."

(5.) The awards will be made by the Editor of *Photography* and *Focus*, whose decision will be final.

(6.) No responsibility for missing entries or for entries which, from any cause, are not adjudicated upon will rest with the organisers of the competition.

(7.) The prizes will be in cash. After deducting ten per cent. for clerical expenses, the entrance fees will be distributed as follows: One third of the amount will form the first prize, and the remaining two-thirds will be divided into separate prizes of (approximately) £1 each.

HOLIDAY INFORMATION.

BRIGHTON.

I should like some photographic information about Brighton.—G.A.H.

Brighton, called from its accessibility "London by the Sea," has many photographic possibilities. On the sea front, in rough weather, some fine wave pictures may be obtained. The best places whence to obtain these subjects are on the Palace Pier, admission 2d. (hand cameras only). The pier itself affords a good picture at night, when it is lit with thousands of electric lights. The best position is near the Aquarium.

From this point Rottingdean can easily be reached by Volk's electric railway, fare 2d., passing "Black Rock." Along here one should look out for good coast pictures and seascapes. Some interesting work can be done at Rottingdean itself, where Rudyard Kipling has his home.

Walking back to Brighton, over the hill, by bearing to the right Ovingdean is reached. Here is the historic Ovingdean Grange, where Charles II. stayed on his flight to France. Opposite the Grange is the old church, also worthy of note. Continuing over the Downs for from a mile and a half to two miles one reaches Race Hill, whence for a penny a tram can be taken to the starting point, or the same place can be reached by keeping to the sea from Ovingdean (2½ miles).

Opposite the Palace Pier is the Aquarium (3d. admission), and three minutes' walk away is the Royal Pavilion, built by George IV. whilst Prince of Wales, and afterwards purchased from the Crown by the Brighton Corporation. It is worth a visit, both pictorially and historically. Visitors are allowed over the Royal suite (6d. admission). The pavilion stands in extensive grounds, in which all through the summer promenade concerts are held twice a week.

Up the hill from the Pavilion lies Brighton's old parish church, St. Nicholas. It is supposed to date back to the Conquest, and is certainly mentioned in the Domesday Book, 1086. The eleventh century font should be noticed; both its age and the curious figures that are carved upon it have been debatable points amongst antiquaries. A visit to this church, of which much more could be written, would well repay the photographer. In the adjoining graveyard are many notable graves, including those of Phoebe Hessels (the woman soldier), and Capt. Tettersell, who helped Charles II. to escape.

Trams run every five minutes from the Aquarium to Queen's Park, Dyke Road (the Bird Museum), Preston Park, and other places of note (fare 1d.) Apartments can be obtained from 17s. 6d. to 30s. per week. The Boarding House, No. 4, Clarence Street, about ten minutes' from the station, can be recommended. The proprietor is an enthusiastic photographer, and has darkrooms, etc. Inclusive terms, one guinea per week.

Boots, Ltd., 158 and 162. Western Road, and Sanders and Crowhurst, of 55, Western Road, Hove, keep good stocks of photographic materials. The writer, whose address can be obtained from the Editor, will be very pleased to welcome any photographic friends visiting Brighton, and to give them any further assistance or information.—HENRY C. MAHONEY.

NORWICH.

Will you give me what information you may have of a photographic nature about Norwich?—T. F. WELDON.

A few days can be well spent in the prosperous city of Norwich, often termed the City of Gardens, visiting the many ancient and historical buildings which it enshrines. The cathedral is, of course, too well known to need more than passing reference. The castle, now used as a museum, contains the finest collection of Raptorial birds in Europe.

Amongst the chief features of the picturesque city may be named St. Peter's Church, the largest of its forty churches, noted for a very fine peal of bells, Strangers' Hall, over 500 years old, St. Andrew's Hall, Pull's Ferry, and the Dolphin Inn, formerly Bishop Hall's palace.

Lodgings can be obtained in any part of the city at a reasonable figure, varying from 12s. to £1 inclusive. Dark-rooms are available, and materials can be purchased from Messrs. A. E. Coe and Son, of 32, London Street; Messrs. Robinson and Co., chemists, of 13, Orford Road; and Mr. N. Lincoln, chemist, of Rupert Street.

Norwich is the central point for the Norfolk Broads, any of which can be reached from it in about an hour. It is also a good centre whence to visit the seaside towns of Yarmouth, Cromer, Mundesley, Lowestoft, and Sherringham, all of which are within an hour's distance by rail, the third-class excursion fares being 1s. 3d. and 1s. 9d. for half-day and day trips respectively.

A further attraction which affords a mine of wealth to the photographic visitor is the river Wensum. The back part of the river is exceptionally pretty, and suitable viewpoints are easily reached, for boating is very cheap. Boats can be hired for 3d. per hour, or 1s. 6d. the half-day for the boat alone, and the amateur by taking one can make sure of a host of river and pastoral pictures. The front part of the river is also very attractive, several old buildings and two ancient towers fronting on it.—E. J. SKINNER.

TEWKESBURY.

I hope to go to Tewkesbury shortly, and should be glad of any information of a photographic character about it.—C. HILL.

Pleasantly situated in the vale that stretches between the Malvern and Cotswold Hills, at the confluence of the Severn and Avon, Tewkesbury possesses a natural position of great beauty. To a visitor who wishes for a quiet holiday spent amidst old-time memories of Roman, Dane, Saxon, and Norman, Tewkesbury offers at once a splendid field for the artist, photographer, botanist, and geologist.

The town itself is rich in fine old half-timbered houses, in excellent preservation; while in the villages round are excellent specimens of Elizabethan manor houses, old churches, stone crosses, stocks, and picturesque cottages. In the Norman Abbey, which in itself offers a glorious field for the photographer, much will be found for the student of architecture and of men. Musing in its dim religious light one may fancy one hears the shouts of victors and of vanquished streaming from the battlefield hard by where the red rose of Lancaster drooped and died.

The rivers afford excellent opportunities for spending a few hours fishing, while for those fond of boating, pleasure boats of a first-class make may be hired. Steamers run almost every day during the summer months to different points of interest.

The walks round Tewkesbury are full of interest and pleasure.

At the Mythe is an ivy-covered castle where tradition says King John resided—an old stone bridge over the river Avon leading there is said to have been built by him.

The Saxon Church and Saxon Chapel of Duke Odda at Deerhurst, a village four miles down the Severn, are well worthy of inspection.

Plates, papers, and all photographic materials can be obtained from Mr. E. B. Askwith, of 81 and 82, Barton Street, and from Mr. William Jones, chemist, of 147, High Street. Both these dealers provide darkrooms, and others in the town at the professional photographers are also obtainable.

Writing in *The Autocar* on Gloucestershire: Its Beauties and Associations, "Owen John" says, "Tewkesbury itself is the gem of the county." A visitor who "does" our little town and neighbourhood thoroughly will quite endorse that opinion.



Bennett's Persulphate Reducer.

Dissolve in the order named:

Ammonium persulphate	480 grains
Sodium sulphite	96 grains
Water to	10 ounces

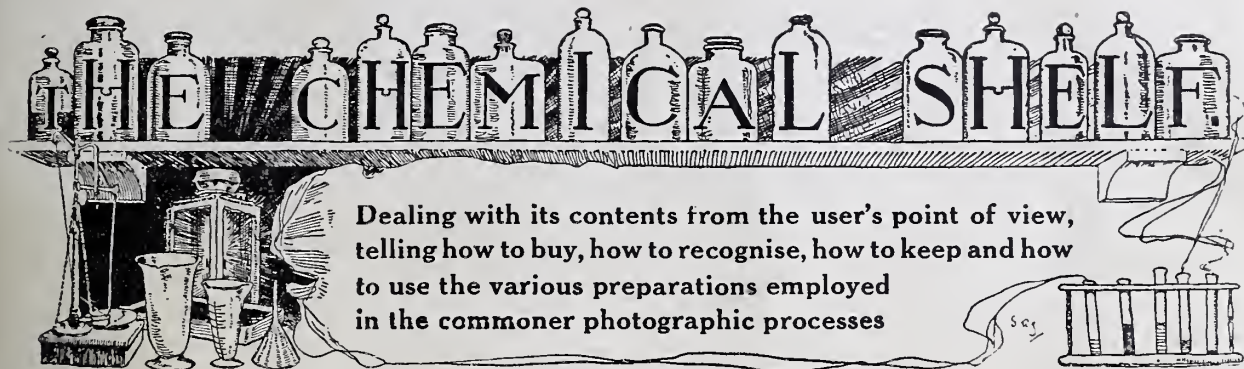
Add 48 minims of sulphuric acid. This forms a stock ten per cent. solution of the persulphate, which keeps indefinitely. For use one part is diluted with nine parts of water.

One Solution Hydrokinone Developer.

Dissolve the hydrokinone and sulphite in order by the aid of heat; the water should not be more than warm, and then add the potassium carbonate.

Hydrokinone	1 ounce
Sodium sulphite	2 ounces
Potassium carbonate	4 ounces
Water	20 ounces

One part of the stock solution to five parts of water forms the working developer.

**IRON SULPHATE.**

Iron sulphate, also known as sulphate of iron, ferrous sulphate, green vitriol, and copperas, is the most important salt of iron commercially. Some of the qualities on the market are very impure, and it should therefore be purchased from a reliable dealer. The salt should be in the form of small, clean, bright-looking, apple-green crystals. In a good sample these are all very much of the same size. It will keep indefinitely in a corked or stoppered bottle in the dry state, but in solution it soon deteriorates, taking on a rusty colour, and becoming useless for any photographic purpose.

Iron sulphate is chiefly used photographically in the preparation of the ferrous oxalate developer, the formula for which was given recently, and need not be repeated. It is also occasionally employed in a clearing solution.

FORMULA.*Clearing Bath for Negatives and Slides.*

Citric acid	...	...	...	1 ounce
Iron sulphate	...	...	...	3 ounces
Alum	...	...	...	1 ounce
Water	...	...	...	1 pint

The solution keeps fairly well, and may be used over and over again until the brown discoloration above referred to indicates that it is no longer in good condition.

KACHIN.

Kachin is a white crystalline powder, very soluble in water, and, as it is specially made for photographic purposes, is not likely to be otherwise than pure. It keeps very well in the dry state, but its solutions, even with sulphite or metabisulphite as a preservative, soon discolour and become useless. In solution, kachin has the characteristic odour of benzene.

Kachin is a very efficient developer for negatives, giving plenty of density with ease, and an excellent brown black colour. It has no tendency to stain either the fingers or the film. It is not so suitable for bromide paper, as with this the prints obtained are generally of a rusty colour.

A curious feature about kachin is that, unlike most developers, it is not affected by the presence of hypo; in fact hypo solution may be added so freely to the kachin that development and fixation may go on hand in hand, the un-

developed plate being merely placed in the solution until it is seen to be completely fixed.

FORMULÆ.*Kachin-Soda Developer for Negatives.*

A.—Kachin	...	...	...	1 ounce
Water to	...	...	...	10 ounces
B.—Sodium sulphite	...	...	...	1 ounce
Sodium carbonate	...	...	...	1 "
Water to	...	...	...	20 ounces

For use 40 minims of A are taken to each ounce of B. No further dilution is necessary.

Combined Developer and Fixer.

A.—Kachin	...	...	...	12 grains
Sodium sulphite (crystals)	...	...	...	120 "
Water	...	...	...	1 ounce
B.—Sodium hydrate	...	...	...	8 grains
Water	...	...	...	1 ounce
C.—Hypo	...	...	...	¼ ounce
Water	...	...	...	1 "

The solution for use is made by taking 160 minims of A, 240 of B, and 40 of C, and diluting to make one ounce.

LEAD ACETATE.

Lead acetate, otherwise known as acetate of lead, or sugar of lead, is a heavy white salt, sold either in small crystals or as a powder. It is extremely poisonous. The quality sold by reliable chemists or photographic dealers is that which should be used. Lead acetate keeps perfectly either dry or in solution. Solutions are generally cloudy, but this may be ignored.

FORMULA.*Combined Toning and Fixing Bath containing Lead*

A.—Hypo	...	...	...	6 ounces
Ammonium sulphocyanide	...	...	...	48 grains
Water	...	...	...	32 ounces
B.—Gold chloride	...	...	...	15 grains
Lead acetate	...	...	...	150 "
Water	...	...	...	16 ounces

Seven parts of A to one part of B are taken for use. ("Kodak Formula.")

The Contents Competition. Results and Awards.

THE READERS OF "PHOTOGRAPHY AND FOCUS" DECIDE ITS BEST FEATURE BY VOTE.

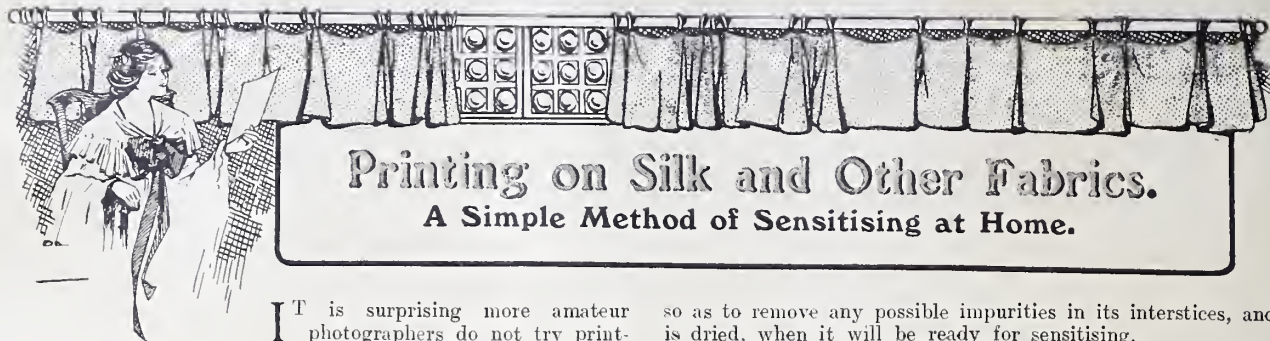
WIDESPREAD interest was manifested in the Contents Competition, which closed on Tuesday, June 16th, and hard work was needed in order that the results might be got out in time for announcement in this issue. The counting left no doubt as to the possessors of the first six places, as the following table shows. Nothing else received over 500 votes.

1. Critical Causerie	...	...	1,331 votes
2. The Competitions	...	...	1,052 "
3. Spirit of the Times and Editorial	...	...	993 "
4. Piffle	...	...	773 "
5. Practical Paragraphs	...	...	732 "
6. The Chemical Shelf	...	...	672 "

No one sent in an absolutely correct list, but the following entry by Mr. Frank H. Keveren, Stoke Villa, Charlton Kings,

Cheltenham, was the nearest, and an autographed copy of Mr. Child Bayley's book, "The Complete Photographer," has accordingly been despatched to him. His list read: (1) Critical Causerie, (2) Competitions, (3) Piffle, (4) Editorial, (5) Practical Paragraphs, (6) Chemical Shelf.

The second prize—a free subscription to *Photography and Focus*—has been divided between Mr. T. R. Powell, of 30, Cwrt-y-vil Road, Penarth, near Cardiff [Mr. Powell's list read: (1) Critical Causerie, (2) Piffle, (3) Editorial, (4) Practical Paragraphs, (5) Chemical Shelf, (6) Competitions], and Mr. Frank Lean, of 6, Rutland Road, Hammersmith, London, W. [Mr. Lean's list read: (1) Critical Causerie, (2) Chemical Shelf, (3) Editorial, (4) Competitions, (5) Practical Paragraphs, (6) Piffle]. Each of these gentlemen will therefore receive *Photography and Focus* free for six months.



Printing on Silk and Other Fabrics. A Simple Method of Sensitising at Home.

IT is surprising more amateur photographers do not try printing on fabrics, silk, cotton, etc., as it is really very easy, and there are far more methods of utilising and displaying such prints than there are when the support of the picture is plain paper. Various fabrics ready sensitised can be bought, but it is an interesting and not a difficult thing to sensitise the material at home. Here is the method that has been followed by the writer. It has the

so as to remove any possible impurities in its interstices, and is dried, when it will be ready for sensitising.

The first operation to which it is then subjected is called salting. For this purpose, we require some powdered dextrine and some ammonium chloride. One dram of dextrine is mixed up with a couple of ounces of cold water, and then four ounces of boiling water are added and the mixture well stirred up. A dram of the ammonium chloride is dissolved in a couple of ounces of cold water and mixed in with the

dextrine solution as soon as this is cold. This forms the salting solution, and the fabric selected should be placed in it to dry, and allowed to get thoroughly saturated with it. It may be left in three or four minutes, or longer if preferred; it makes no difference. The material is then taken out and blotted off with clean photographically pure blotting paper, and allowed to dry. All this can be done in full daylight, and the dried salted silk, or what not, will keep any length of time. Not so the salting solution. This should be used within a couple of days of making it up; and as it is very cheap, and it is convenient to have plenty of it, the liquid should not be stinted.

A day or two before the prints are to be made, the salted textile must be sensitised. The way which the writer has found best is to stretch the material upon a light wooden frame by means of dark room



Early Birds.

By N. B. Roberts.

advantage that it is cheap, needs no dark room, and, being a silver print-out process, the operation can be watched from start to finish, and the different stages are familiar.

First, we must select our fabric. Although different materials differ in the way they take the solution, one has almost unlimited choice. The best effect can be obtained on a fine soft white or pale-cream silk, of the kind used for silk handkerchiefs. This makes most effective prints. It should be well washed and very thoroughly rinsed in clean water,

pins. The instrument used is a bone-handled shaving brush, and with this the sensitising liquid is applied, sparingly, to the surface of the fabric. The brush should be passed quickly over it in a series of straight horizontal strokes, and then the frame being turned round, a series should be made at right angles to the first. What is wanted is an even coating, without more of the solution being applied than is needed to make it even. The actual solution for sensitising is made by dissolving a hundred and twenty grains of silver nitrate in an

ounce of water, and fifty grains of citric acid in another ounce, and mixing the two. Any cloudiness that is visible on dissolving the silver nitrate may be disregarded. Only as much as is wanted should be mixed up at a time, but the silver nitrate may be kept in solution, and the citric acid solution added as required.

The sensitising must be done by artificial light, or in a room with the blinds down, and the fabric, still on the frame, dried in the dark. It is convenient to sensitise in the evening and to print the next day. The fresher after sensitising the material is, the better will be the prints; but it will keep in good condition for a week or so.

The trouble which anyone printing on this material for the first time will encounter will be from its shifting in the printing frame during examination. To prevent this, a simple plan is to take a thin card about the size of the negative, and to cut the fabric about half an inch larger than the negative. It can then be stretched over the card, folded over its end, and attached by strips of gummed paper. The adhesive cards which are on the market for use as film carriers can be used, but are not so satisfactory.

Another way that has been suggested is to print not by observation, but with an actinometer.

Printing is done by daylight, the side that was sensitised being put in contact with the negative. A good vigorous negative is a necessity, if the result is to be effective, since, unless the picture can be printed very strongly, it will look weak when finished, on account of the way in which its deepest shadows are lightened by the texture of the material.

The printing, therefore, must also be carried out fully; and the picture on the fabric, when it comes from the printing frame, should look very decidedly darker than it ought to appear when it is finished.

After printing, it is placed in a solution of one dram of common salt in half a pint of water for five minutes, and then is washed in three or four changes and toned in the ordinary way. There is no better toning bath for the purpose than the old acetate-gold one of the following composition:

Sodium acetate	...	...	...	30 grains
Gold chloride (solution 1 dram = 1 grain)	...	...	...	1 dram
Water to	...	...	...	8 ounces

The toning is carried further than is actually desired, as the picture reddens a little in the hypo. After toning, it is rinsed and fixed for five minutes in one ounce of hypo dissolved in ten ounces of water. Washing for half an hour in a dozen changes of water completes the photographic side of the operations.

The prints should be allowed to get almost dry and then be carefully ironed—a process which will be found to make a great improvement in their appearance. The household authorities will find plenty of applications for such photographs as are made in this way.

One is to use the print as the centre of a doyley. Little cushions, mats, etc., are also effectively decorated in this way; while the fabric may be put on a stretcher or mounted on a card and treated exactly like a paper print, from which it forms an agreeable variation.



SUNLIGHT IN THE CLOISTERS.

BY EDGAR R. BULL.

Suggested Titles for Mountain and Moorland Pictures.

"Mountains on whose barren breast
The labouring clouds do often rest."—*Milton*.

"The mountains huge appear.
Emergent, and their broad bare backs upheave
Into the clouds, their tops ascend the sky."—*Milton*.

"Wrapt in clouds the bluish hills ascend."—*Pope*.

"A heathy waste, immix'd with reedy fens."—*Burns*.

"The mountains whose white peaks
Catch the morning's earliest streaks."—*Lowell*.

"Goodly prospects o'er the hills expand."—*Byron*.

"Wild pomp of mountain majesty."—*Byron*.

"Calm and deep peace on this high wold
And on these dews that drench the furze,
And all the silvery gossamers
That twinkle into green and gold."—*Tennyson*.

"The wide mountain waste."—*Shelley*.

"Mountains bare and brown."—*Whittier*.

"The mountain road."—*Longfellow*.

"Soft banks and knolls of lowly hills."—*Ruskin*.

"Night's candles are burnt out and jocund day
Stands tiptoe on the misty mountain tops."—*Shakespeare*.

"The hillside's dewpearled."—*R. Browning*.

"By thicket green and mountain gray."—*Scott*.

"The rugged mountain's scanty cloak
Was dwarfish shrubs of birch and oak."—*Scott*.

"The dawning beam
Purpled the mountain and the stream."—*Scott*.

"In brambly wilderness."—*Tennyson*.

"Dreary gleam of moorland."—*Tennyson*.

"Long gray stretches of marsh and ling."—*H. Sutcliffe*.

"With blossomed furze unprofitably gay."—*Goldsmith*.

"His dwelling was full fair upon a heath."—*Chaucer*.

"Bents and coarse grass upspearing o'er the rest
. . . . Now shine conspicuous."—*Cowper*.

"Alas! my journey, rugged and uneven,
Through prickly moors and dusty roads must wind."
—*Wordsworth*.

"When twilight shades darken the mountain's head."
—*Wordsworth*.

"Where the peal of swelling torrents fills
The sky-roofed temple of the eternal hills."—*Wordsworth*.

"The intense tranquillity . . . of silent hills."
—*Wordsworth*.



GRASSY MOUNTAIN HILL



Imperial P.O.P.

Imperial P.O.P.

MADE IN 3 TINTS

- (i.) Mauve.
- (ii.) White.
- (iii.) Pink.

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and delicacy of tones.

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SUBSCRIPTION.—PHOTOGRAPHY AND Focus will be forwarded regularly at the following rates: GREAT BRITAIN. ABROAD.

Twelve Months .. s. d. 6 6	Twelve Months .. s. d. 10 10
Six Months 3 3	Six Months 5 5
Three Months .. 1 8	Three Months .. 2 9
Single Copy 1½	Single Copy 2½

REMITTANCES.—Postal Orders, Cheques, etc., should be crossed and made payable to Iliffe and Sons Limited.

ADVERTISEMENTS.—All communications on advertisement matters should be addressed—The Advertisement Manager, PHOTOGRAPHY AND Focus, 20, Tudor Street, London, E.C. All copy for displayed advertisements for the issue of any particular week must reach Tudor Street by the first post on Monday morning in the week previous.

PREPAID ADVERTISEMENTS.

SALE AND EXCHANGE (for Amateurs only).—1d. per word, minimum 0d.

PROFESSIONAL AND TRADE.—Three words 2d., minimum 1/-.

All advertisements to be inserted on these terms must be accompanied with remittance. To ensure insertion, letters should be posted in time to reach the offices, 20, Tudor Street, E.C., not later than first post on Wednesday.

BOX NUMBERS.—For the convenience of advertisers, letters may be addressed to numbers at the office of the paper. When this is desired, 2d. will be charged for registration, and three stamped and addressed envelopes must be sent for forwarding replies. Only the number will appear in the advertisement. Replies should be addressed, "No. 000, c/o PHOTOGRAPHY AND Focus, 20, Tudor Street, London, E.C."

DEPOSIT SYSTEM.—Persons who hesitate to send money to unknown persons may deal in perfect safety by availing themselves of our Deposit System. If the money be deposited with PHOTOGRAPHY AND Focus both parties are advised of this receipt, and upon intimation of the arrival and acceptance of the goods, the money is forwarded, less a charge of 1/- for registration. The time allowed for a decision after receipt of the goods is three days. For all transactions exceeding £10 in value, a deposit fee of 2s. (d. is charged. Cheques and money orders should be made payable to the Proprietors, Messrs. Iliffe & Sons Limited, and addressed to them at Coventry.

PUBLISHING NOTICE.—Communications for the Publishers should be addressed, Iliffe & Sons Limited, 20, Tudor Street, London, E.C.

EDITORIAL NOTICES.

ADDRESS.—All communications for the Editor should be addressed: The Editor, PHOTOGRAPHY AND Focus, 20, Tudor Street, London, E.C.

TO CONTRIBUTORS.—The Editor will be glad to consider original up-to-date manuscripts on photographic subjects. All contributions must be typewritten, or in very legible handwriting, on one side of the paper only, and should bear the name and address of the sender. Letters or communications arising out of matters already appearing in the paper are not paid for. The Editor disclaims legal responsibility for the safety of matter submitted to him, but he will endeavour to return rejected manuscripts, etc., when a stamped addressed envelope is enclosed for that purpose. No notice whatever can be paid to communications without the name and address of the sender, not necessarily for publication.

PRINTS FOR CRITICISM.—Readers sending prints for criticism or advice are notified that in all cases it is understood that by so doing permission is given for their reproduction, without fee, in PHOTOGRAPHY AND Focus.

PRINTS FOR REPRODUCTION.—Reproduction fees are only paid by arrangement beforehand. The sending of a print, without any condition stated, will be taken as permission to reproduce it without fee. The Editor will be glad to consider for publication, with or without letterpress, photographs of special interest, on terms to be arranged.

PAYMENTS.—Articles and illustrations are paid for on acceptance.

INTERVIEWS.—The Editor will be at 20, Tudor Street, on Wednesdays, between the hours of 9.30 and 11.30 a.m., but can only be seen at other times by appointment.



JOHNSON'S ATHLETIC CLUB holds its fourth annual sports at the Spaniard's Farm, Hampstead Lane, on the 27th inst.

THE LANCASHIRE AND CHESHIRE Photographic Union's annual excursion was announced for Saturday last, the 20th inst., at Blackburn, for Whalley, etc.

THE IMPORTANCE OF STOPS is not limited to its photographic meaning. We wonder how many of our readers noted the advertisement of the "Standa" in *Photography and Focus* last week, and realised what was wrong. Nothing much beyond the displacement of a semi-colon, yet it made it read that "the Standa tank means that you exchange the darkroom for daylight uncertainty; for certainty," and so made a statement about that excellent piece of apparatus which in a journal that has consistently advocated time development is rank heresy.

Books for . . . Photographers.

Science and Practice of Photography.

By CHAPMAN JONES, F.I.C., F.C.A., F.R.P.S.
Price 5/- nett. Post free 5/4.

Instruction in Photography.

By SIR WILLIAM ABNEY, K.C.B.
Price 7/6 nett. Post free 7/10.

Practical Orthochromatic Photography.

By ARTHUR PAYNE, F.C.S.
Price 1/- nett. Post free 1/2.

Successful Negative Making.

(Illustrated.) By T. THORNE BAKER, F.C.S., F.R.P.S.
Price 6d. nett. Post free 7d.

All About Enlarging.

(Illustrated.) By C. WINTHORPE SOMERVILLE, F.R.P.S.
Price 6d. nett. Post free 7d.

Photography Made Easy.

(Illustrated.) By OUL-VIVE.
Price 6d. nett. Post free 7d.

Lantern-slide Making and Exhibiting.

(Illustrated.) By JOHN A. HODGES, F.R.P.S.
Price 6d. nett. Post free 7d.

Pictorial Landscape Photography.

(Illustrated.) By J. C. WARBURG.
Price 6d. nett. Post free 7d.

A full list sent on receipt of a postcard.
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20, TUDOR ST., LONDON, E.C.

THE SCOTTISH FEDERATION OUTING to Stirling, which took place on the 6th inst., was favoured with perfect weather.

THE WORK OF MR. WALTER BENINGTON is at present on view at the rooms of the Royal Photographic Society. The exhibition will remain open, free of charge, daily until July 31st.

HEREFORDSHIRE PHOTOGRAPHIC SOCIETY. Mr. F. C. Pritchard having resigned the honorary secretaryship, Mr. W. Williams, of High Street, Hereford, has been elected in his place.

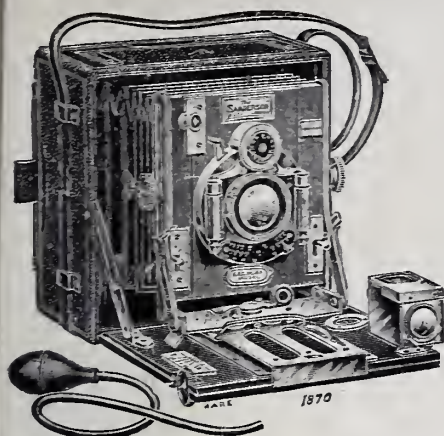
AN EXHIBITION of Bromoil prints is to be seen, up to the end of the present month, free of charge, at the premises of Messrs. Griffin, Kingsway, London, W.C., during ordinary business hours.

IN PORTRAITURE, Mr. T. Lee Synn told the Rochdale Society, the reflector should only be very sparingly used. He pointed out that the use of a diffusing screen had the effect of lightening the shadows and produced that effect more naturally.

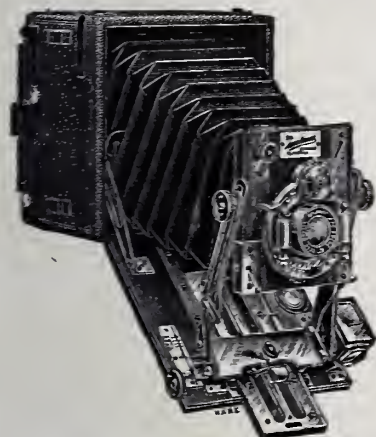
A REMARKABLE OFFER is made this week by Messrs. O. Sichel and Co., full particulars of which will be found in their advertisement in this issue. It is, in brief, to present to the first 125 purchasers of the Sickle-de-Luxe reflex cameras a Fulmenar anastigmat for use with the camera. We can only say that it seems an excellent way of getting hold of a very real bargain, for both the camera and the lens are excellent.

DESENSITISING AUTOCHROME PLATES. In a communication to the French Photographic Society, M. Le Roy points out that by placing the Autochrome plate, before development, for one minute in a ten per cent. solution of sodium hydrosulphite, its orthochromatic properties are so far destroyed that development can be watched by means of the darkroom light. After immersion the plate is rinsed and developed in the ordinary way. The sodium hydrosulphite referred to is the dry salt made by the Badische Anilin und Sodafabrik.

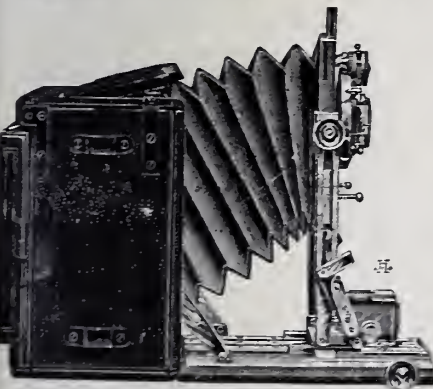
OVER-EXPOSURE. The majority of amateurs, said Mr. Kimber, at the Southampton Camera Club, do not understand how best to treat an over-exposed plate. The method generally adopted is to try to secure sufficient density by prolonged development, which, in a good many instances, results in an unprintable negative. The method he advocated was to develop for a very thin negative, and by subsequent intensification with mercuric iodide, to obtain the density desired. For bromide paper, he strongly recommended the use of fresh developer for each print.



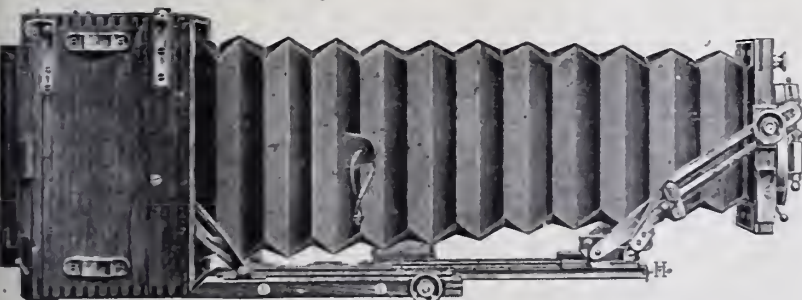
This is a Sanderson with the Lens in the normal position.



Here the Lens has been dropped by means of the Sanderson Front, to get an excess of foreground.



The Lens can be raised by the Sanderson Front to give an excess of sky.



Pictures may be increased in size by extending the Sanderson front and removing the front part of the Lens.

Why the "Sanderson" is so very much better than other Cameras.

The Sanderson Universal Front is a patent, or rather a series of patents, any one of which would be useless without all the others. The Sanderson Front is called Universal because it rises, falls, recedes, extends, or swings in a perfect arc at the will of the operator. Yet it can be locked rigidly and instantly in any position.

Then again the Lens is swung on its axis and the locking nuts that control its movements are fitted at the end of the axial pins.

Each of the swinging Arms that carry the Lens front have one single slot that goes through in their entire length, and in these slots the axial supports of the Lens can pass freely up and down, backwards or forwards, always preserving its balance, and ready to be locked rigidly in any position by a single touch. All these wonderfully simple movements are patented.

The great point to remember is that in buying a Sanderson you are getting the finest, most famous, and most useful Camera that the world produces.

You are buying a most beautifully made Camera, one that will serve you well and can always be absolutely depended upon. You are buying a Camera with a reputation that is above reproach.

There are Field Cameras and Hand Cameras in the Sanderson series, and the prices range from

£4 4s. to £31 12s. 6d.

Call at any good Photographic Dealer's and ask to see a "Sanderson."

Write for a booklet (stating whether you want a Hand or Field pattern) to the manufacturers:

HOUGHTONS

The largest manufacturers
of Cameras in the Kingdom,

**88/9, HIGH HOLBORN,
LONDON, W.C.**



A Specimen Set of Tabloid and Photographic Chemicals.

IT was a good idea on the part of Messrs. Burroughs, Wellcome and Co. that prompted them to put up in a neat little cardboard case a specimen set of their "Tabloid" photographic chemicals, because such a set must act as a most persuasive missionary, making converts to tabloidism of all those photographers into whose hands it falls.

The set consists of sufficient "Rytol" developer tabloids to make one pint of solution, which, as our readers know, is a universal developer, applicable alike to plates, films, bromide and gaslight papers and lantern plates, tabloid potassium bromide for use with this, tabloid sepia toner to make

twelve ounces of solution, and tabloid chromium intensifier to make eight ounces, together with a little booklet of directions showing how each is to be used.

It will be seen, then, that the set does not fail where so many "specimens" fail, but provides enough of each of the chemicals that are supplied in it to allow a proper test to be made.

The price of this little set, which can now be obtained from all photographic chemists and dealers, is 1s.—a figure at which it is an excellent investment.

The knowledge of the tabloid system is worth the shilling very many times over.

The Biermann Exposure Indicator.

THE little piece of apparatus bearing this name is an exposure calculator of the slide rule type, which has been designed by Mr. E. A. Biermann, of the Arthur Cox Illustrating Co., Ltd. It is intended for use with the Watkins or Wynne Actinometer or with the Imperial Exposure Meter, not being itself provided with means for measuring the strength of the light.

Although a special "Biermann Speed Number" is used in the exposure indicator, it is not intended to issue lists of plate speeds, but a table is given showing the Biermann numbers, which correspond to various Watkins, Wynne, and H. and D. numbers, and directions are given by which, with the indicator, the speed number of the plate can be calculated from the exposure given in some instance which has been proved upon development to be correct.

Another feature of this exposure meter is the fact that it is possible with it to take into account the efficiency of a shutter, instead of merely its mechanical speed, and allowance can also be made for lenses of different kinds.

The experiences of the past winter have shown that the ordinary rules of exposure do not apply to Autochrome plates in a weak light, the exposure necessary increasing rapidly as the light becomes weaker, far more rapidly than with an ordinary plate. To counteract errors that might arise from this source, the instructions with this exposure indicator contain a table of factors by which the exposure, after it has been ascertained in the usual way, is multiplied, so as to give the increased figure necessary. The same method may be used with other deeply screened plates, as well as with Autochromes. There is no doubt that with such a table as is supplied in this exposure indicator the results would be more accurate than those obtained without its aid, but we do not think that any table, based as this is on time of day and year, will meet the case fully.

The Biermann Exposure Indicator is neatly and substantially made of card, and is issued by the Arthur Cox Illustrating Co., Ltd., of 63 and 64, Ludgate Hill, Birmingham, price 1s. 6d. nett.

Roberson's Materials for the Oil and Gum Processes.

THE artists' colour makers, Messrs. Charles Roberson and Co., of 99, Long Acre, London, W.C., have been giving their attention of late to the oil and gum processes, particularly the former, and have put upon the market special pigments, brushes, and medium for oil-printers, which we have used recently with much satisfaction, and which will be found to get over much of the difficulty which amateurs have experienced from the use of makeshift and unsuitable material.

Messrs. Roberson state that the Autotype Co.'s double transfer papers Nos. 76, 77, and 20-20 have proved very satisfactory in their hands. These papers should be sensitised in a bath of the following composition:

Potassium bichromate	...	...	...	...	1/2 ounce
Citric acid	...	...	...	...	1 dram
Water to	...	...	...	...	20 ounces
Strong ammonia about	...	...	...	...	3 drams

The bichromate and citric acid should be dissolved separately, each in part of the water, and their solutions mixed. Sufficient ammonia is then added, a little at a time, to turn the

solution to a lemon-yellow colour. The paper is immersed for from one to two minutes, and is then hung up to dry, like carbon tissue. Printing should be carried on until all the details in the highest lights begin to show.

The pigments are put up in china pots at a price of 1s. each. Black, sepia, burnt umber, warm sepia, indigo, burnt sienna, raw umber, and Payne's grey are kept in stock, but any other colours are made to order. The medium is sold in 6d. and 1s. tubes. No doubt under certain conditions the medium would be found very valuable, but in our hands we found the pigment work best exactly as it was supplied; in any case, only a trace of the medium was required, anything more making the pigment too soft.

Fitch-hair deer's-foot brushes are supplied by the same firm, at prices ranging from 1s. to 6s. 6d., according to size: and a special quick-drying varnish is made, which may be applied to the prints with a brush, after they have been given three weeks in which to get perfectly dry and hard.

Colours, gum, brushes, and papers for the gum-bichromate process also figure in Messrs. Roberson's list.

The Challenge Self-toning Papers and Cards.

MESSRS. Backhouse and Coppock, Ltd., of the Challenge Works, Macclesfield, have submitted to us for examination a series of samples of the self-toning papers and postcards which they are now supplying.

The treatment of these cards is of the simplest character. They are simply printed out deeply and placed without washing in a hypo bath of a strength of three ounces to the pint. In this they are completely toned and fixed in six minutes. If purple tones are required the strength of the hypo solution is doubled. Washing is finished in one hour in running water or in many changes.

The cards we found to give excellent results with a minimum of trouble. A series of tinted cards gave a wide range of colour very suitable for some subjects, although our own preference was for the plain white or cream. The "Artro" semi-matt self-toning cards had a particularly agreeable surface. It may be of interest if we point out that the "Challenge Works" announce a competition with prizes amounting in all to £10 in cash for the best print on the "Challenge" photographic papers. The first prize is £5, and 10s. worth of goods are to be given to the dealer supplying the paper on which the prize print is made. Entries for this competition close on June 30th.

'CRITERION'

PRIZE

COMPETITION.

**OVER FIFTY
CASH PRIZES**

for the best
prints on
"Criterion"
Paper or
Postcards.

First Prize,
£2 2s. 0d.

Second Prize,
£1 1s. 0d.

Third Prize,
10s. 6d.

and
50 other prizes of
2s. 6d. in cash or
'Criterion' Goods
as preferred.

Intending Competitors are
requested to kindly note
that there is

Only One More Week.

All entries must be in on
- - or before the - -

CLOSING DATE,
JUNE 30TH.

♦ ♦ RULES. ♦ ♦

1. Each entry must be on "CRITERION" Paper or Postcards, any size, grade, or surface, mounted or unmounted
2. Any number may be submitted, but the outside label from a packet must be sent with each set of 6 or less sent in.
3. The cards *must* be purchased from a dealer, whose name must be given. If your dealer does not stock—send us a p.c. with his name and address, stating your requirements, and we will forward to him by return of post.
4. Entries must be sent in on or before 30th June marked "Competition P," to the Birmingham Photographic Company, Ltd., Stechford, Birmingham.
5. No entry forms are required.
6. Entries will be returned as soon as possible if stamped and addressed wrapper is enclosed (not loose stamps), but responsibility cannot be accepted if any are accidentally lost or mislaid.
7. The Company's decision must be accepted as final.
8. No picture which has previously won a prize in any competition must be submitted.

The Birmingham PHOTOGRAPHIC COMPANY, LTD., Stechford, near Birmingham.



BEGINNERS' COMPETITION.

Open to all photographers who have never taken an award.

PRIZES.

First Prize.—A signed copy of "The Complete Photographer," a half-guinea work by Mr. Child Bayley, now in its second edition.

Second Prize.—A free subscription to *Photography and Focus* for twelve months.

One or more certificates of honourable mention will also be awarded.

RULES.

(1) Each competitor can send as many prints as he likes, but each print must bear on the back the coupon, published each week, the name and address of the sender, the title of the picture, and no other writing whatsoever.

(2) No print will be eligible that is larger than 5 in. x 3 in. (postcard size) or 5 in. x 4 in.

(3) No print must be mounted.

(4) No handwork other than simple spotting is permitted on negative or print, nor shading or dodging of any kind. It is distinctly understood that entry in the competition implies a declaration by the competitor that this rule has been complied with; and in case of dispute the editor shall have the right to call for the negative, from which the entry purports to be a simple direct contact print.

(5) No prints will be returned, and no correspondence with regard to the competition can be undertaken.

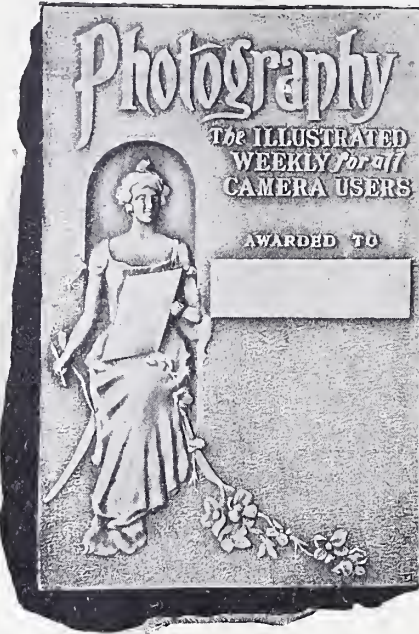
(6) The publishers of *Photography and Focus* shall have the right to reproduce, without payment, any of the prints sent in, winning or otherwise. But except the winning prints, the names of competitors of other prints that may be reproduced will not be published without the competitor's consent.

(7) All entries must be addressed "Beginners' Competition," the Editor of *Photography and Focus*, 20, Tudor Street, London, E.C., and must be delivered at that address by the first post on the closing date at the very latest.

CLOSING DATE.—Tuesday, June 30th.

TITLE COMPETITION.

The picture for the current title competition, and the rules of the competition, will be found on pages xii. and 139 this week. The coupon is on page x. Entries close on Friday, June 26th.



ADVANCED WORKERS' PRINT COMPETITION.

PRIZES.

First.—"Photography" Silver Plaque.

Second.—"Photography" Bronze Plaque.

Third.—"Photography" Bronze Medal.

One or more certificates of honourable mention will also be awarded.

RULES.

(1) All photographs must be sent addressed "Advanced Competition," the Editor of *Photography and Focus*, 20, Tudor Street, London, E.C., postage paid, to reach there not later than the first post on the closing date, and must contain a stamped addressed envelope or label (not loose stamps) if they are to be returned.

(2) Each photograph must be mounted, but not framed. Prints in slip-in mounts are not eligible. Each must bear on the back the name and address of the sender and the title of the picture. No letters or other communications must be enclosed with the prints. Every print must bear attached to its mount a coupon for the competition of the month which will be found in each issue of the paper.

(3) Each photograph must be the work of the competitor as regards selection and arrangement of the subject, exposure and development of the negative, and printing, development or toning, and mounting of the print.

(4) The prints which are accompanied by stamped envelopes or labels will be criticised by post, and the editor shall have the right to reproduce any of the prints, winning or otherwise. The awards will be made a fortnight after the closing date.

(5) Awards may be increased or withheld at the absolute discretion of the judge, and in all cases of dispute the decision of the editor will be final.

(6) There is no restriction as to the eligibility, except as set forth in these rules, and except that the same negative must not be used more than once in the competition. That is to say, that a print from it once submitted, all further prints, however varied, are ineligible.

(7) Neither editor nor publishers of *Photography and Focus* shall be held in any way responsible for the safety of prints, or for their return to the competitors.

(8) The sending of a print to the competition will be regarded as a declaration to the effect that it is eligible under these rules, and that the competitor agrees thereto.

CLOSING DATE.—Tuesday, June 30th.

SPECIAL SUBJECT COMPETITIONS. OPEN TO ALL READERS.

PRIZES.

First Prize.—"Photography" Plaque in Silver.

Second Prize.—"Photography" Plaque in Bronze.

Third Prize.—"Photography" Medal in Bronze.

One or more certificates will also be awarded.

RULES.

(1) The subject of each photograph entered must be that announced for the particular competition.

(2) Each competitor can send as many prints as he likes, but each print must bear on the back the name and address of the sender, the title of the picture, and no other writing whatsoever. Each print must have attached to it a coupon for the competition of the month, which will be found in each issue of the paper.

(3) No print must be mounted. No handwork other than simple spotting is permitted on negative or print, nor shading or dodging of any kind. It is distinctly understood that entry in the competition implies a declaration by the competitor that this rule has been complied with; and in case of dispute the editor shall have

the right to call for the original negative, from which the entry purports to be a simple direct contact print.

(4) No prints will be returned, and no correspondence with regard to the competition can be undertaken.

(5) The publishers of *Photography and Focus* shall have the right to reproduce, without payment, any of the prints sent in, winning or otherwise. But except the winning prints, the names of the senders of other prints that may be reproduced will not be published without the sender's consent.

(6) All entries must be addressed "Special Subject Competition," the Editor of *Photography and Focus*, 20, Tudor Street, London, E.C., and must be delivered at that address by the first post on the closing date at the very latest.

SUBJECTS AND CLOSING DATES.

A River Scene. Closes Tuesday, June 30th.

A Plant, or Flower, taken growing out of doors. Closes Friday, July 31st.

A Harvest Scene. Closes Monday, August 31st.

AN INCONTROVERTIBLE FACT.


It is an incontrovertible fact that when Coupons are sent to us for exchange they are almost invariably accompanied by a letter expressing appreciation of

Gem Plates, Papers, & Postcards

and gratitude for the introduction of them by means of the Coupon Scheme.

THE GEM COUPON SCHEME.

Every Packet of Gem Plates, and every 6d. and 1s. packet of Gem Paper has a coupon attached. Twelve of these coupons entitle the sender to 1s. worth of Gem materials—plates, papers, postcards, or a 2in. Iso screen. Thus every amateur obtains a free presentation from us, without the trouble and uncertainty of a competition.

 COUPONS
ARE AVAIL- -
ABLE UNTIL
FURTHER - -
NOTICE, AND
CAN BE - - -
EXCHANGED-
NOW. - - - -

PLATES.

METEOR PLATES 270 H. & D.

IDEAL FOR GENERAL AND SNAP-
SHOT WORK.

SALON PLATES 400 H. & D.

PERFECT FOR VERY FAST WORK.

GEM ISOCHROMATIC PLATES

240 H. & D.

A USEFUL ALL - ROUND PLATE,
HIGHLY SUCCESSFUL FOR LAND-
SCAPES.

PAPERS.

GEM GASLIGHT PAPER

GEM BROMIDE PAPER

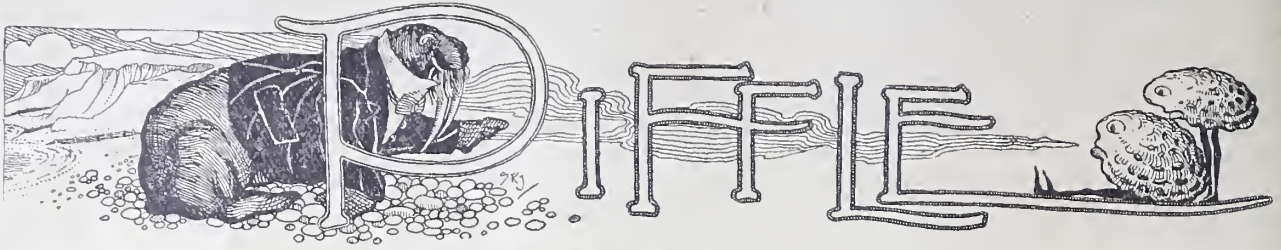
GEM P.O.P.

EXTREMELY EFFECTIVE PRINTING
PROCESSES.

Buy through your usual Dealer,
stipulate GEM.

GEM DRY PLATE CO., LTD.,

Telegrams : "CHEMITYPE, LONDON." Cricklewood, LONDON, N.W. Telephone No. : 2757, P.O. HAMPSTEAD.



"The time has come, the Walrus said, to talk of many things."

THE re-appearance of Ranjitsinji in English cricket reminds me of a newspaper paragraph concerning him. It described how he was photographed, and I have kept the cutting till now as an example of the sloppily idiotic yarns that are considered good enough to palm off on newspaper readers. Photographs of Ranji were in demand at the time because he had just succeeded to the throne (I expect he has a throne) of his Indian Kingdom, and had assumed the sweet title of the Jam of Somethingor-other—a title which prompted the obvious wish that the Jam might long be preserved.

* * *

I will quote the exact words of the newspaper so that I may not be suspected of tampering with the truth: "As Ranjitsinji, his brother, Archie MacLaren, and A. A. Lilley were setting out by motor for a day's shooting, the moment Ranji placed his foot on the step a huge camera was reared a couple of yards away. 'Put it down,' shouted Lilley, as he rushed round to the photographer. With the utmost sangfroid the man with the camera carefully focussed the Jam, while Lilley gave vent to his views on photographers generally. Click went the shutter, and simultaneously Lilley's hand came down heavily on the camera. Little harm was done, however, and the photographer quietly packed up his camera and walked off triumphantly with his picture."

* * *

That, ladies and gentlemen, is the veracious account of a historic incident—The Taking of the Jam, or the Language of Lilley. Note first of all that the camera was a huge one; shall we say a 15 × 12? Fancy a photographer beginning to "rear" such a camera when the Jam had got one foot on the motor step. Before the duffer had finished his "rearing" Ranji might have reached his destination and begun his shooting. And he reared it two yards from his subject—a 15 × 12 view at two yards! Note also that although Lilley "rushed round" and brought his hand heavily down on the camera, the photographer of cold blood (sangfroid) had time to focus, insert the slide, set the shutter, open the slide, and make the exposure. Anyone who has handled a "huge" camera knows what these operations mean in time and labour. It often takes two men and a boy to pull the slide open. Yet, in spite of his frigid gore (sangfroid), the gifted photographer was able to accomplish all this before Ranji could get his foot off the step or Lilley rush round the car.

* * *

Reading between the lines, what an abject idiot the photographer must have been. He not only completely revealed himself as such by his *modus operandi*, but he acted not nor spake while Lilley gave vent to his opinion of photographers in general and proceeded to punch the outfit of one photographer in particular. Had I been that photographer I should have suspended my focussing of the motor-mounting Jam, and I should have painted the Lilley in language that would have withered him where he stood. And as to his blow, he would never have blown again.

* * *

Assuming for a moment that there is some germ of truth in the paragraph, I will venture to give the Jam and his friends some advice, and that is, that when next they see a huge camera being reared by some foolish photographer as they are boarding a motor 'bus, let them step inside quickly, pay their fare, and take no notice.

* * *

Talking about cricketers, I have a cricket photograph the editor has sent on to me for comment. That's the worst of

it. Whenever there is a tough job on hand it gets pushed off on me. But I will deal with this picture on one condition, namely, that I am allowed to copy it for reproduction on this page, and I know the editor won't let me fill up my space with my own drawings. [Oh yes, he will. Send it along.—ED.]

* * *

I have shown above what absolute piffle some newspaper paragraphs are. I now proceed with feigned reluctance, but real delight, to draw attention to a full-page picture advertisement appearing in the issue of June 9th of a paper known as *Photography (and Focus)*. The picture advertises Zigo, and will certainly puzzle the historian of the future when he deals with photographic processes at the beginning of the twentieth century.

* * *

In the work of art to which I refer, a young man is seated on the conveniently low parapet of a bridge. What would be his trousers if they were longer are obviously made out of an old draughtboard. On the ground next to him is a hand camera, which I take to be a quarter-plate, although it is half the height of the parapet. On the parapet is a bottle labelled "hypo," but of which I have my suspicions; next to it is a packet of paper about 12 × 10—a convenient size for making quarter-plate prints. The youth has a big dish full of prints which he is toning in blazing sunshine. There is no doubt that the sun is shining because it is in the picture. Also it is a whopper. But strong as its light must be, there is a still stronger light which not only obliterates the sun's shadows but casts shadows of its own at right angles to the sun's light. On the other parapet is a talking bird paying compliments to a dog which is emptying into the abyss below a sack marked "Toning outfit." Part of the late contents of the sack is visible, and includes three dishes, three bottles, one graduated measure, scales and weights, and three glass tubes of something or other. I never realised before that a toning bath contained so many ingredients. The moral seems to be that the typical user of "Zigo" is a fatuous lunatic who tones his prints out of doors and allows his ugly dog to throw away valuable materials a sackful at a time. I don't like the insinuation, because I have used "Zigo" myself, and intended to use it again. But I decline to use it further if I have to sit on a parapet to do it, and especially if it is essential to wear breeches made from a draughtboard. I shall use instead the "Rotona" advertised on another page. "Rotona tones itself." That's the paper for me. I wonder if it tones itself on a parapet, and wears weird breeches, and keeps a dog. As it tones itself from red to purple it should give a good rendering of Lilley rushing round the Jam's motor to assault him of the cool blood (sangfroid).

THE WALRUS.

SUBSCRIPTIONS.

"PHOTOGRAPHY AND FOCUS" is published by Hiffe & Sons Ltd., of 20, Tudor Street, London, E.C., and of Coventry, every Tuesday morning in Town and Country, and may be obtained of all News-vendors and Bookstalls, or delivered first post on Tuesday at the following rates:

GREAT BRITAIN.		s. d.	ABROAD.		s. d.
Twelve Months .. ..	..	6 6	Twelve Months .. ..	..	10 10
Six Months	3 3	Six Months	5 5
Three Months	1 8	Three Months	2 9
Single Copy	1 1	Single Copy	2 1

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MELBOURNE (Victoria), SYDNEY (N.S.W.), BRISBANE (Queensland), PERTH (W.A.), WELLINGTON (N.Z.), and CHRISTCHURCH (N.Z.): Sole Agents—Messrs. Gordon and Gotch, Ltd.

Sole Agents for SOUTH AFRICA, TRANSVAAL, and GRANGE RIVER COLONY—The Central News Agency.

PHOTOGRAPHY. JUNE 30TH, 1908

PHOTOGRAPHY

A JOURNAL FOR EVERY CAMERA USER.

EDITED BY R. CHILD BAYLEY.

PUBLISHED WEEKLY.

JUNE 30TH, 1908. TUESDAY; No. 1,025. Vol. XXVI.



WHAT'S THAT?

BY H. LIGHT.

The Special Summer Number of "Photography and Focus" will be published next week. It will deal particularly with holiday and travel topics, and will contain extra pages and extra illustrations in colour. Price One Penny. To prevent disappointment, copies should be ordered early.

EDITORIAL

or Holiday-making Photographers.

Once more we would remind our readers that the Special Summer Number of *Photography and Focus* will be published a week to-day, and that it will be filled from cover to cover with matter and illustrations appealing particularly to the holiday maker. Amongst the special articles which have this character will be found one by Mr. M. W. Leigh on "Travel Notes for Photographers," packed full of useful information for the tourist with a camera. "On the Continent with a Hand Camera" and "The Camera and the Custom House," as their names suggest, are for those who think of going abroad. "Figure Work with the Hand Camera," by the editor, and "Seaside Snapshots," by Mr. Dixon Hunt, are suitable alike for foreign or home work, while "The Photography of Yachts," by Mr. F. W. Becken, and "Landscape Work in Summer," by Mr. Alexander, are for the photographer in the country or on the water. Altogether a budget of good things it may fairly claim to be, and the price, as usual, will be One Penny. In view of the extra demand, it will be wise to order a copy early.

The Contents Competition.

The large response which this competition met with from our readers was very gratifying to us, and the result is one which we view with much interest. On the whole, it was very much what we expected, as, of course, an editor has many ways of gauging the opinion of his readers. The only surprise was the very high position—second, in fact—taken by "competitions" themselves. They are a strong feature of *Photography and Focus* we know, but we were hardly prepared to see them come so very decidedly towards the top. "The Bandit," whose "Critical Causerie" was such an easy winner, has our hearty congratulations on the well-deserved appreciation in which he is held.

We have other interesting competitions in course of arrangement, details of which will be announced shortly.

Using Old Carbon Tissue.

Many an amateur who prints in carbon adopts the economical plan of buying his tissue insensitive, more or less in bulk, and sensitising it as he requires it.

Insensitive carbon tissue, as is well known, keeps indefinitely. We should like to caution those who do this, especially those who buy their tissue by the roll, from unrolling too quickly any tissue that has been kept for some time in a very dry place. The coating on a roll which had been laid aside since last summer, on being opened the other day and unrolled suddenly cracked in a number of places, and there was a great deal of it wasted. The roll was put aside in a cupboard for a day or two, some wet cloths being hung up near it, and was then sufficiently softened to be opened right up to the core without cracking.



Preserving the Thames from Disfigurement.

An effort is being made, we gather from a daily paper, to preserve the banks of the Thames from disfigurement by ugly buildings and hoardings. There is everything to be said in favour of some such action, but we are not so sanguine as to believe that any useful result will come from it. At the first glance it would seem that a power which is exercised by the local authorities in all our great land thoroughfares should still more be exercised in the

case of the far more beautiful and, in fact, the only Metropolitan water thoroughfare. But the demands of commerce are inexorable, and the coal shoots, factory chimneys, advertisements, gasometers, and other decorations of the lordly Thames are not likely to diminish. Photographers must e'en make the best of a bad job, and if they want an example of what can be done in that direction they might do much worse than turn to Mr. Huson's very effective sunset, in which the chimneys of the Chelsea power station loom large in the foreground.

Photographing Lightning.

A thunderstorm at night is an opportunity for obtaining a photograph of lightning which ought not to be missed by anyone who has a camera available. It is, moreover, quite absurdly easy. A hand camera, which focusses with a scale, is set to "infinity," pointed in the direction where the flashes seem most frequent, and the lens opened so that a plate is exposed to the night sky. After a particularly brilliant flash or two has been seen where it might be expected to appear on the plate, the plate may be changed, and this continued as

long as plates, storm, or the photographer's patience will allow. If the camera is one of fixed focus, nothing has to be done but to keep the lens open. A focussing camera unprovided with a scale must be set for infinity beforehand, by focussing it sharply upon an object two or three hundred yards away, and making a mark on the baseboard so that it can be set up at night opened to that extent.

The development of plates exposed on lightning differs in no respect from the development of landscapes or portraits, except that, as in any case the greater part of the plate has got no developable image on it at all, it is well to add a little bromide to the developer to prevent fog. Half a grain to each ounce will be found to be ample. Time development is very suitable, as very often there is nothing at all to be seen on the plate until it is taken out of the hypo. It is well to expose as many plates as possible, since many brilliant flashes, which one would think must be recorded on the plate, for some reason or another do not appear, and, as we have said, no plate should be rejected as a failure until it has been fixed and examined in daylight.

AN IMPRESSION.

Now Jenkins, after many hours of unremitting toil, Completely failed, though hard he'd tried to make a print in "oil";

The pigment on the high lights in stupendous chunks would fall,

Whilst the shadow parts declined to take the colour on at all.

'Twas not a "truthful" rendering, and so in his despair He flung it on a chair close by, and left it "lying" there;

Then threw himself upon a couch; his weary eyelids closed,

And pigment brushes seemed to hop about him as he dozed.

At length he woke, refreshed, and said, "I mean to conquer yet";

In absent mood he sat down on the print—still dripping wet.

"I'll stick to it until I pick it up," he then averred; And when he rose he found he'd uttered truth in every word.

When from his nether covering the print he had removed,

He found, to his amazement, the gradation much improved.

To critics then he showed it, for their verdict all athirst;

They sat in judgment on the print which Jenkins sat on first.

The critics all were full of praise—they termed it "simply grand";

They said it showed the impress of an artist's subtle hand.

So Jenkins, highly gratified, was far too much afraid To say how he'd produced the good impression that he'd made.

The Photographic Convention.

Next week the Photographic Convention for the first time in its career meets outside the United Kingdom—at Brussels to wit—under the presidency of Sir E. Cecil Hertslet, His Britannic Majesty's Consul-General for Belgium. At the time of writing everything promises fine weather, and the quaint old Belgian cities should be seen at their best. The convention seems largely to have abandoned the serious photographic purpose of its youth, and has become an annual holiday, at which some of the well-known men in the commercial side of photography meet and enjoy one another's society. We hope that the 1908 function will be as successful as any of its predecessors, and are sure that if the personality of its president can make it so, it will be.

Mounting Prints when they are Wet.

It is so easy to get a print to lie flat when it is wet that the temptation to mount it while it is in that condition is very great. Yet there are reasons (more than one) why this should not be done. For one thing the print is slippery, and there is a much greater likelihood that some of the mountant will get on to the front of it or of the mount at least, and it is never a very safe thing to remove it; but a still more powerful reason is that when the print is wet it is expanded in all directions, and as it dries it contracts. The result of the contraction is that the mount is pulled and warped to an extent that no degree of pressing and bending will ever permanently cure. The ideal mounting method is one in which the print is never moistened at all, and this is provided by the system of dry mounting that is now so well known.

A Tank for Plate Development.

On another page this week will be found an account of the new tank for developing plates which has been introduced by the Kodak Co. We welcome it, not merely because it is a convenience, making the tank development of plates nearly as simple and easy as the tank development of roll film, but because it must inevitably lead to an improvement in the quality of the negatives of those who use it. Convenience and comfort are dearly purchased at the price of a lower quality of result but when we can get them, and can get with them a higher quality, those are indeed blind who refuse to avail themselves of the opportunity. We congratulate the company on making another stride towards simplicity and accuracy in photographic work.

Sea Water for Photography.

In the booklet of instructions issued with the tank there is a note to which we would draw the attention of those of our readers who go down to the sea in ships. It is to the effect that sea water may safely be used in compounding the developer and for all the processes of tank development, provided only that the final rinsing is in clean fresh water. Now that both sea and fresh water are liberally supplied on board ships, the tedium of a lengthy voyage can be relieved by photography without any fear of the results being injured by sea water being used for most of the work. We have known this and acted on it in the past, but it may be news to some of our readers, so we find a place for it in this column.



On Using more than One Lens.

INTERCHANGEABILITY of lenses was at one time a frequent topic amongst photographers, but comparatively little has been heard about it of late. The user of several lenses seems to be content to have as many separate camera fronts as he has lenses, and to take these about with him, so that he

can change from one to another at will.

A few years ago Messrs. Taylor, Taylor, and Hobson succeeded in turning attention to this subject, and in their patent lens flanges introduced an improvement of a very marked kind. No one who has used a camera where the lens often required screwing and unscrewing, and has had one of these patent flanges, would care to go back to the older methods. But so far the flange is to be met with on T. T. and H. lenses only. This flange not only did away with all fumbling when a lens was to be screwed in, and allowed one to know exactly how many turns to give to unscrew it, but it also was absolutely standard in size. That is to say, all lenses made by the firm which were approximately of the same diameter would screw into the same flange, while a metal ring or adapter could be obtained which would screw on to a smaller lens and enable it to fit the flange of a larger one.

It may not be so well known as it should be that Messrs. Taylor will fit any lens on the market to take one of their patent flanges for a small charge.

The separate front method of carrying several lenses has been referred to above. In this, each lens should have its flange screwed on a small square mahogany board of the standard size. This board fits into a little recess on the camera front, and is held in place by a strip of brass along the bottom and by two turn buttons on the top. It allows a lens to be changed in a moment, and it also accommodates itself to those lenses which project into the camera beyond their flanges, which the sliding fronts do not. When a sliding front is used with such a lens, the latter has to be unscrewed until the front has been slid into the camera—a nuisance at all times, and a needless waste of time. On the other hand, there is always a tendency for the loose front board pattern to be decidedly loose. It should, of course, be a good fit, and when fastened in place should have no wobble whatever.

Closely allied to this subject is that of the fitting of shutters to different lenses. The trouble here is not likely to be very great, because shutter work is rarely done with more than one lens; if a second is used, it is generally got by unscrewing the front half of the lens in use. This can usually be done without affecting the shutter, whether this is of the Unicum kind or a roller blind. A shutter of this latter kind may be mounted behind the lens, and any lens changing device or standard flange may be attached to the shutter itself, so as to avoid all trouble on the score of want of interchangeability. This could not be done with a portrait lens and one of the ordinary R.R. or anastigmat type, because of the great difference in size of the two lenses; but, then, no one would be likely to want to do it.

It would certainly be a mistake to try to use the same shutter on two lenses, one an inch and the other, say, three inches in diameter, because, for one reason, the large shutter would be a cumbersome piece of apparatus on the smaller lens; and, for another, portrait lenses are not often used

under circumstances that make the ordinary form of instantaneous shutter of much service.

When a roller blind shutter is to be fitted on the front of the lens, if the lens has a hood, it should be ascertained whether the front combination can be removed without interfering with the hood. If it can, it does not matter whether the shutter fits the hood or the barrel of the lens; but if the hood is part of the mount of the front lens itself, and inseparable from it, then the shutter must have an adapter, so that when the back lens only is in use, the shutter can be fitted firmly on to the barrel. The Thornton-Pickard Co. supply a rubber flange which makes a capital adapter for fitting a shutter to a smaller lens. If the hood is



A Rough-haired Terrier.

By Bryant Blake.

removable, it is better to have a shutter fitted to the barrel and not to the hood. The shutter framework will itself act as a hood, and a smaller shutter will suffice.

STICKPLAST CEMENT. The latest addition to the "Stick-plast" family is a cement which it is claimed will "stick anything and everything and will stand boiling." We can say we have not tried it with everything, but we have tried it with a number of things, and with all of them it was most tenacious. It is put up in 6d. and 1s. tins by the Leadenhall Press, Ltd., of 50, Leadenhall Street, London, E.C. It ought to prove very useful to photographers, and is just the thing for mending a broken dish.

CHATS WITH A BEGINNER

ON THE MOVEMENTS OF A CAMERA.

III. The Rising, Falling, and Cross Front.

By E. LLOYD.

NEXT in importance to the focussing arrangements come the various movements of the camera front. The front is that end to which the lens is attached. Whatever adjustments it may possess, it must be capable of being fixed quite rigidly and strictly parallel to the back. This end is attained in most cameras by an arrangement which ensures the front being at right angles to the baseboard; when, if the back is also at right angles to it and the base lines of the two are parallel, back and front will be parallel.

Some cameras have the front permanently attached to the baseboard, but except in the case of box pattern band cameras this design is almost entirely limited to studio work. It is certainly the best form to carry a heavy lens, but is not likely to concern the beginner. He will have a camera, if it is of the landscape type, in which the front is secured by means of two or more brass struts. These should be provided with notches or other means for indicating when the front is at right angles to the baseboard.

In some patterns the front swings on its struts, and this allows it to be carried further from the back than would otherwise be the case. It also allows the lens to be raised considerably. These are the real advantages of the swing front. The actual power to swing the lens is not by itself any advantage; it may even be a drawback.

However we use the swing front, it should always be possible to know when it is at right angles with the baseboard, and that should be the position in which it should be clamped.

The power of raising the front is of all movements of the camera that which the photographer most frequently wants. The fact that the camera is generally used only four or five feet from the ground, which therefore bounds all our pictures on one edge, means that the greater proportion of the majority of the subjects of a photographer will lie above the lens. So that if the camera is level and the lens is opposite the middle of the plate, it will almost certainly show more of the ground and less of the upper part of the picture than we want. To remedy this, either the camera must be pointed upwards (which, as we shall see later on, sometimes introduces other troubles) or the lens must be opposite some part of the plate which lies above the centre. This latter is accomplished by raising the front.

A lens that will only just cover the plate is of no use, if the rising front is to be employed. We must have a lens that will do more. A lens that will just cover a half-plate, for example, is none too large for a quarter-plate, if the camera has plenty of rise and it is to be used.

A falling front is the same movement as a rising front, but in the opposite direction. In both cases the movement is reckoned from the central position—that is, with the lens opposite the middle of the plate. If it can be lowered from this, it is said to be fitted with a falling front. This adjustment is hardly ever required.

It would be a convenience when taking a picture of buildings, etc., from a height, and sometimes it is handy when the camera has been set up and everything is ready, and we find that we have just a little too much at the top of the picture and not quite enough at the bottom. But it is no

hardship, even to a very busy photographer, to have to use a camera without a falling front, whereas if he had not a rising front he would be continually in difficulties.

The cross front is much the same as the falling front in this respect. It is wanted a little oftener, but not much. It has this merit—that with a camera with a division down the centre, the lens may be slid to one side of the division and one picture may be taken, and then, without moving the camera, it may be slid over to the other side and a second one secured, so that a pair of stereoscopic pictures can be made on a half-plate with a single lens. But the absence of a cross front is no great drawback.

Many of the very compact forms of folding hand camera which are now obtainable are fitted with rising and falling fronts, and some have a cross front also. In such instruments it should be a rule always to see that the front is central before attempting to close the camera, as, if not, something may be injuriously strained, or the bellows may be injured. Many cameras have arrow marks to show when the lens is central, and it is to be regretted that all those that have moving fronts are not similarly provided.

When the front of a hand camera is moved, it must not be forgotten that the image in the finder no longer corresponds to that which will fall on the plate. This holds good even when the finder is carried on the front and rises and falls with it, except with a finder which takes the form of a frame the size of the plate, attached to the front, and an eye-piece attached to the back. Such a finder is approximately accurate, however the front is moved.

In hand camera work, the cross and falling fronts are never needed; but the rising front is constantly wanted. In fact, if the camera were not fitted with a rising front, it would be better to have the lens fixed a little above the centre of the plate rather than exactly opposite to it. But although it is so often wanted, no very great amount of rise is generally needed on a hand camera.

Architecture, on the other hand, requires at times all the rise of which the camera is capable, and this is especially the case when the camera has not got a swing back. Given a good lens, one that will cover much more than the plate we are using, it is more convenient to have a great rise of front than to have a swing back; but with a lens that will not do much more than just cover the plate in use, then when we want to get in our picture anything high up and just in front of us, the swing back becomes a necessity.

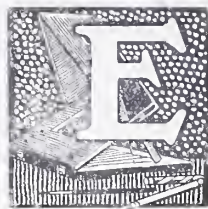
If the front is raised more than the lens will allow, the two top corners of the picture (the sky, if there is a sky in it) will be dark in the print. If the whole top edge is dark instead of merely the corners, then the bellows of the camera are cutting off part of the picture, and must be pulled forward towards the lens, and fastened by the little tabs that are generally provided for the purpose.

Neither rising, falling, nor cross front should be used unless the subject demands it, as the lens is never quite so much at its best as when it is opposite the middle of the plate. In landscape and similar work where distortion will not be noticed, it is better, therefore, simply to tip the camera up or down to get more or less of the ground on the plate. This generally allows a larger stop to be used, and the illumination of the plate by the lens is more uniform.



Home Portraiture Simplified.

By Herbert Smith. Special to "Photography and Focus."

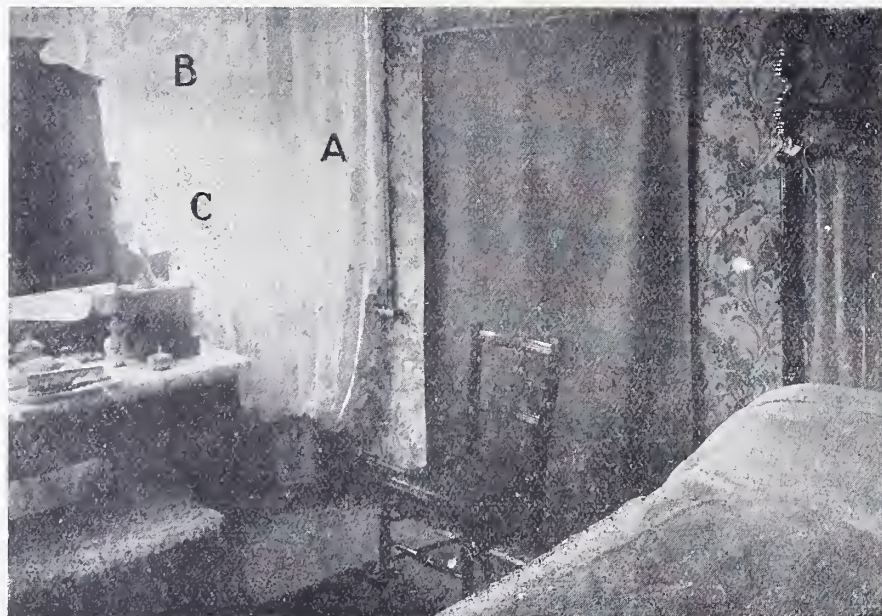
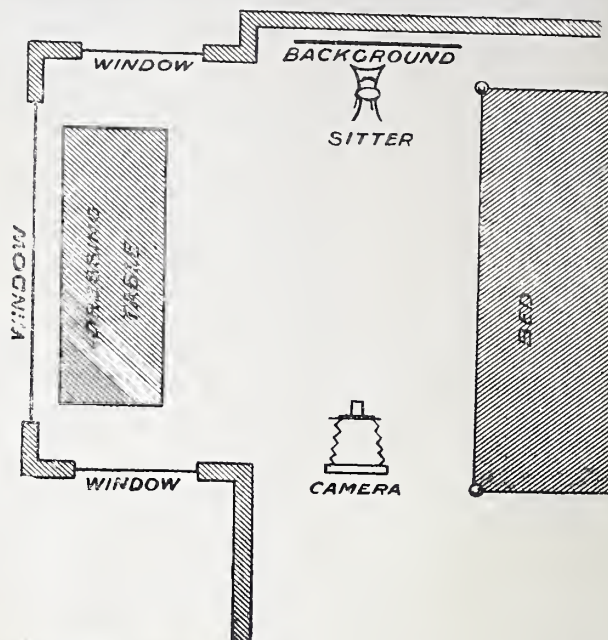


EVERYONE to his taste was what I said to myself after reading the article on photographing pretty girls, which appeared in *Photography and Focus* for May 19th. "*Chacun à son goût*," said I; not that I am in the habit of talking to myself in French, but it sounded more emphatic than its English equivalent. My remark had reference, not to the ladies—there could be no difference of opinion about them—but to the methods advocated.

In spite of all the elaborate accessories which we see advocated—diffusers, screens, reflectors, and what not—the results in the shape of home portraiture to-day are no better than they were in the days before the home portraiture expert was born.

Whether the results reproduced are good or not is for my readers to judge. They were all taken in a common or garden bedroom—garden, since there were beds in it—without the use of the much-talked-of reflector and diffusing screen. I use nothing more than is to be found in any ordinary bedroom. I control the light by means of the landlord's cheap blinds and the wife's lace curtains, while the white counterpane on the bed acts as a reflector. The diagram and photograph illustrate my home studio.

The window is of the ordinary bay pattern to be found in such large numbers in the suburbs. Being upstairs, one gets more light than in the sitting-room below. The end



A bedroom as a studio.

blind A is drawn down, as light from that particular window is not wanted. The principal light comes from the window at the opposite side and the one in the centre.

The lace curtains act as a diffuser of the direct light at C, while the blind B may be raised or lowered as desired.

Bedrooms, as a rule, are light and airy—if not, they should be. In such a case one does not require anything very special in the way of reflectors. I use the bed as it stands, for the simple reason that the counterpane, being in a horizontal position, reflects the light upwards, under the eyes and chin. If more reflector is wanted, in order to brighten up the darker side of the face, I put a chair under the counterpane, so as to bring it nearer the face; but this is a dodge that is rarely necessary.

With rapid plates and a lens working at $f/8$, I can get well-exposed portraits on a bright day in about two seconds.

The eyes should always go with the head. Nothing is more disagreeable than to see an eye looking out of the corner, or twisted across the face. The eyes of a full or nearly full face should look full at the camera; a little above the lens, I prefer, if you can trust your sitter not to drop the eye as the cap is removed. If the head is turned to the right, the eye should go as much to the right; if a little more, it is no great matter, but it should never come back again, or a shy or frightened look will be given.—H. P. ROBINSON.

Success in the Gold Toning of P.O.P.

Pointing out the Importance of Little Details.

TONING has been described as the amateur photographer's bug-bear, but there is no reason why, with a little care, the process should have such an ill-name. It is an easy enough operation when carried

out as it should be, and much of the supposed difficulty and many of the supposed failures of toning are not failures at all as far as that part of the proceedings is concerned, but are due to exaggerated notions of what the toning bath will do.

No toning bath ever compounded will give a good rich purple picture from a poor, thin negative. No gold toning bath at all will yield a black tone. No toning bath can compensate for under-printing. No toning bath will tone two prints to the same colour when one is immersed in the freshly made bath, and one in it when it is in the last stages of exhaustion. These are the limitations of the process from which there is no escape, and if the photographer is not successful with his toning he would do well to see if he is trying to get something from the operation which it will not yield.

The actual final colour of a print on P.O.P. depends on several things, of which the composition of the bath is only one. The character of the negative and the depth of printing are the most important of all. This will be understood when it is pointed out that good toning is a process of reduction; it weakens the contrasts of the print when submitted to it—visibly while it is in the bath, invisibly also to an extent which is manifested when the print is fixed. The more we tone—that is to say, the more the colour of the print is pushed towards violet or purple and away from red—the greater is this reduction. Therefore a very strong print is wanted if the toning is to be carried far.

A strong print calls for a strong negative; hence the influence of the negative on the tone. But it is well known that the contrasts of a print can be altered very considerably, according to the rate of printing. Quick printing in a strong light gives soft contrasts, slow printing in a weak light strong ones. This in itself is a good reason for printing in diffused light, seeing that the prevailing fault of imperfect negatives is lack of sufficient contrast. There is another thing that might be mentioned on this subject of rate of printing. Quick printing gives a print which before toning is distinctly redder than one which has been slowly printed, the

latter always tending more to a purple.

The final colour of the print will not be affected by these differences, except so far as they may mislead the photographer. For this reason a salt bath before toning is a good thing; it reddens the purple prints, and so makes it much easier to watch the actual change which the toning bath is making.

A well-printed proof from a good negative is easily toned. The first thing is to wash it free from the soluble salts it contains, salts which are very necessary for the printing, but most injurious in toning. This



*Illustration to the article "Home Portraiture Simplified" on the opposite page.
Taken in an ordinary bedroom.*

is an operation which is often shirked. Several changes of water, transferring the prints separately and not in a mass, will be found a necessity. If it is neglected the toning will be irregular, double tones may make their appearance, and there is a great chance of the whites being discoloured.

Next in importance to the preliminary washing comes the condition of the toning bath itself. If we take half a pint of toning solution, and put print after print into it to tone, until at last it is exhausted, the last

grain of gold to each eighteen quarter-plates or eight half-plates.

It must not be forgotten that P.O.P. is sensitive to light until it is fixed, although after the preliminary washing it is much less sensitive than before. The prints must not be washed in very strong daylight, nor be left lying about in strong daylight. On the other hand, toning ought always to be done in daylight, as by artificial light it is very difficult to judge the tones produced. After one lot of prints are toned they may be just rinsed and put into a solution of common salt; half a teaspoonful in a pint or so of water is quite strong enough. This stops toning, and they may be left in it until all the rest are toned, when they may all be rinsed together and placed in the hypo.

Toning should not be put off after printing for more than a few hours; it should always be done the same day, and the sooner the better. In printing the first operation should be to mix up the toning bath, using the sulphocyanide formula given by the maker of the paper. Sulphocyanide may be kept in a ten per cent. solution (one ounce of sulphocyanide in ten ounces of water). Gold in a solution of a strength of one grain of gold chloride to each dram or ounce of water, whichever may be preferred. For each grain of sulphocyanide required in the toning bath ten minims of the stock solution is taken and diluted with water to make the required amount. Then the gold solution is added, and the bath is stood on one side to mature while the printing is done. It is better not to use a sulphocyanide bath



A Humble Suppliant.

By Cecil Green.

prints obviously will be toned in a bath of a different composition from the first, and will be different in colour. To prevent this is very simple. The toning bath is divided into a number of separate portions, and every two or three prints are given a portion to themselves. When these prints are toned the solution is poured away, and a fresh lot is taken for a fresh lot of prints. Exactly how much of the solution is required for a certain number of prints cannot be laid down, as it varies with the make of P.O.P.,



Persian Kittens.

By Terry Hunt.

the colour required, and even the character of the subject of the prints: but a good rule to go upon is to make up as much of the toning bath as will contain two grains of gold chloride for each five hundred square inches of P.O.P. There is no need to measure the prints to work this out to a nicety. We may take it at the rate of a grain of gold to each sixpennyworth of P.O.P. at the ordinary prices, or a

directly it is made up, but it should on no account be kept from day to day. If it is used too soon the prints will reduce considerably in the fixing bath. It is at its best from six to twelve hours after mixing.

Nothing but plain hypo solution should be used for fixing, and the prints should be kept in motion all the time—not by rocking the dish, which is not satisfactory, but by taking out the bottom one and putting it on the top, and so on. But the tone of the print

will be settled by the time it reaches the hypo, and fixing is outside my subject.

The essentials of a good tone, therefore, are (1) a good negative, (2) printing to a sufficient depth, (3) adequate preliminary washing, and (4) a properly made up toning bath used as above described and of the strength and composition given by the maker of the paper. The alum bath may be used before toning

if preferred to harden the gelatine and make it better able to stand handling. But the prints must be washed in several changes of water between the alum solution and the toning bath itself; and, although the alum bath reddens the prints when they are put into it, it will have no effect on the tone ultimately obtained if everything is properly carried out.

Correspondence

For the free discussion of all matters of general interest to Photographers

The Editor is not responsible for the opinions of his correspondents

UNINTENSIFYING INTENSIFIED NEGATIVES.

Sir,—Your paragraph in last week's "Spirit of the Times," on removing the effects of intensification, caught my attention, because I have often done the same thing, yet without employing the dangerous cyanide.

Provided the negative has been thoroughly washed, a simple solution of clean hypo has never failed, in my hands, to remove all traces of intensification, cleanly, quickly, and without reducing the density of the negative below its normal state.

Perhaps this simpler method may be of interest to your many readers. It refers, I may add, to negatives intensified with mercuric chloride followed by ammonia.

Yours, etc.,

A. W. H. WESTON.

GLAZING PRINTS.

Sir,—Judging from paragraphs and articles which appear from time to time in *Photography* and *Focus*, many of your readers would seem to meet with trouble in glazing their P.O.P. prints, the trouble generally taking the form of a difficulty in getting the print to leave the surface to which it has been squeegeed.

As I have had trouble in this direction in the past, but have succeeded in getting rid of it entirely by a very slight alteration in procedure, I venture to write you on the subject, in the hope that what has been of value to me may be equally so to brother amateurs. The whole secret seems to lie in the use of an alum bath, by which the gelatine is thoroughly hardened before any attempt to squeegee it is made. In my own practice, after the prints are fixed and washed, they are placed in a solution of fifty grains of chrome alum in ten ounces of water, in which they are kept moving for two or three minutes. They are then washed in three or four changes of water and dried. No difficulty whatever will then arise in stripping them from glass or from ferrotype sheets.

May I add also that the squeegeeing material, glass or otherwise, is always finally polished with clean wash leather kept for that purpose, and not with a cloth or duster? The polishing always electrifies the surface a little, and if a cloth is used, no matter how carefully it is done, there is sure to be left upon the surface of the plate a liberal supply of dust, fine hairs, etc., as can be seen if it is closely examined. These interfere with the perfection of the gloss, even if individually they are unnoticed.

Yours, etc.,

A. D. BALLARD.

PHOTOGRAPHY AT THE FRANCO-BRITISH EXHIBITION.

Sir,—With reference to your notice *re* photographing at the Franco-British Exhibition, I found that permission could be fairly easily obtained by writing a few days before you intend visiting, and then, on your arrival at the exhibition, to leave your camera in the cloak room, as you have no permit, and then make straight for the administration office, which is situated near the Wood Lane entrance.

Arriving there you will be directed, after stating your requirements, to the press office in the same building, where, on stating that you have already written asking for a permit, and on writing a declaration that you will not photograph in any of the buildings or publish any of the photographs, a permit will be granted.

You will find that it is rather a nuisance to attempt to do much work there, as every official is authorised to ask you to produce your permit whenever he sees you using a camera, owing to the entire rights for photographing, except under the above conditions, being reserved to one firm only.

Apologising for troubling you at such a length, but am only doing so in order that you may set any enquiries at rest,

Yours, etc.,

A. E. DUNN.

THE WEEK'S MEETINGS.

MONDAY, JUNE 29TH.

Bournville and D.P.S. Camp Wood, Bournville.
Bradford P.S. Hirst Wood.

TUESDAY, JUNE 30TH.

Batley & D.P.S. Knosthorpe Hall.
Hackney P.S. Photographing and Printing Clouds. G. Capper, J. Linley.

WEDNESDAY, JULY 1ST.

U. Stereoscopic S. "Artificial Light Photography." P. Dennis.
Leeds C.C. Adel Woods.
Devonport C.C. Flete.

THURSDAY, JULY 2ND.

Northamptonshire Natural History Society and Field Club. Pitsford.
Hull P.S. General Meeting.

SATURDAY, JULY 4TH.

Batley & D.P.S. Boston Spa.
South Suburban P.S. Rochester.
Glasgow Southern P.A. Bridge of Weir.
Barrow Naturalists' Field Club. Finsthwaite.
Oliver Goldsmith P.S. Round the Nore.
Northamptonshire Natural History Society and Field Club. Rouen.
Preston C.C. Dolphinholme.
Blackburn & D.C.C. Samlesbury Hall.
Govan C.C. Kilmalcolm.
Hull P.S. South Cave.
Rugby P.S. Birdingbury.
Wallasey A.P.S. Thurstaston.
Coventry P.C. Brinklow, Stretton, and Monk's Kirby.
Halifax C.C. Cromwell Woods.
L. & P.P.A. "An English Journalist in America." T. Bedding.
Windsor P.S. Porthkerry.

MONDAY, JULY 6TH.

Photographic Convention opens. Brussels.
Walthamstow P.S. "Architecture." J. Cox.

Societies will have their meetings announced here if the syllabus is sent to us at the beginning of the Session, or from time to time.

Photography in an Ordinary Room.

*A Convenient Apparatus Cupboard : Hints on Washing
Negatives and Prints*



NY mention of doing away with a dark room brings up recollections of the developing machine and daylight loading. The substitute for a dark room illustrated below is of another kind. It is described by Mr. T. H. Holmes in "Camera Craft."

A friend of mine, he writes, keeps his chemicals in a little cupboard in his sitting room, and does all his photographic work on his writing table. A piece of thin oilcloth is spread over it first, as a precaution, although during an entire evening spent in developing and printing it did not appear to be necessary. Amidol is used for plates and papers, as the developer requiring fewest bottles. The hypo solution was used in a grooved tank; the plates were rinsed in a bucket of water; the dishes were put on the table touching each other, so that nothing was spilled between them; the washing was done in the domestic bath, plates being washed in a tank placed in the bath, to which the water was led from the tap by a rubber tube.

Prints were washed by filling the bath to the depth of about a foot and allowing the prints to hang vertically therein from corks. A box, says Mr. Holmes, contained several dozen bottle corks, about an inch long, and three-



quarters of an inch in diameter at their larger ends. These corks had been split lengthwise, after a V-shaped cut had been made in the top, and a common rubber band held the two halves firmly together. This formed a clip, and by pinching the top the V-shaped notch closed, and the lower jaws opened to grasp a print on the white margin, when, on releasing the pressure, the rubber band immediately caused the jaws to close firmly. One of these cork clips was put on

to each print as it was dropped into the water, where it floated near the surface, on edge, much like a plate in a grooved box. The hypo solution being heavier than water sinks from the floating print, which is thus speedily washed. The same method may be used for cut films.

This method of washing prints has many advantages. The prints do not lie in a bunch at the bottom, so are washed quickly and thoroughly. There is no danger of the corners of one print injuring the face of another. There is no need for rapid motion of the water, nor for constant attention.

This man had no dark room, writes Mr. Holmes. He did not want one, nor need one, simply because he was neat and tidy in his working instead of unnecessarily sloppy and



slovenly. "It was a fine object-lesson, and I now no longer wonder that such a man with such methods can turn out good work."

The Eastman Plate Competition. £240 in Cash Prizes.

EIGHTY-ONE money prizes, amounting in all to no less than £240, are offered in the new competition which is just announced by Kodak, Ltd. The competition, which is open only to amateur photographers, is for prints obtained upon Eastman plates (Rapid, Extra Rapid, Special Ultra Rapid, and Orthochromatic), and printed upon one or other of the Kodak papers.

The competition is divided into three classes: (I.) For novices, restricted to those who have never won a prize in any photographic competition. (II.) Open. (III.) Open to all amateurs for Eastman plate negatives developed in the Eastman plate tank. For further details the prospectus should be consulted. It can be obtained from any dealer, or direct by addressing a postcard to Kodak, Ltd., 57-61, Clerkenwell Road, London, E.C.

Entries close on August 20th, September 21st, and October 20th, the competition being in this way divided into three distinct sections, which will be separately judged, £80 in prizes being offered in each section.

The prize-winning prints and the negatives from which they are made, with all rights therein, will become the property of Kodak, Ltd.; unsuccessful prints will be returned to competitors who send with their entries a stamped addressed envelope or wrapper of sufficient size.

Nothing has been more remarkable in previous competitions organised by Kodak, Ltd., than the number and quality of the prints which have been sent in to them; and we have no doubt that with money prizes of such substantial amounts as £15 and £10 the present competition will appeal to a very great many of our readers.



Unaffected Portrait Photography.

ON the opening of the one-man show of his work at the rooms of the Royal Photographic Society recently, Mr. Furley Lewis read a short paper, which appears in the current issue of the "Journal" of

the Society. The paper, which was as sound in its doctrine as it was fresh in treatment, is too long to be reprinted *in extenso*, but what follows gives in Mr. Furley Lewis's own words the gist of it.

The appeal I would make (said he) is for the use of our medium in the production of good and unaffected *photography*, rather than work, clever enough, appallingly clever, sometimes, but which affects resemblance to some other medium, and work in which the producer's indebtedness to anything so commonplace as a negative is carefully obliterated.

I would rather utilise, as far as possible, the power our lens gives us—beset as it is with a multitude of limitations—of recording essential truths, and, occasionally, some subtle phases of character.

Please do not understand me too narrowly. I am second to none in my admiration of many exquisite portrait prints made by processes giving "control," as it is called, but the examples I have in mind were such as made manifest that the control was exerted by an artist, and not by the process itself.

I speak rather from my own standpoint as a fledgeling professional portraitist, bearing in mind that my sitter desires first a "likeness," rather than a "controlled" something which I may—or may not—consider a "work of art."

I would try first to make a record of my sitter as he appealed to me, and if, by taking thought, there may be added to this something of the inner man, the more intimate personality, I should be thankful, and at the same time disloyal enough to think that at this latter was attained in spite of my medium, this, for reasons which will appear later. In speaking of the limitations which beset us, it is almost impossible to avoid comparison between our craft and the art of the painter, but I do so in no invidious sense, for the very best in photography and the best in painting will never come into competition. There is a great gulf fixed between, but the one may often inspire and stimulate the other.

I can imagine no more salutary and chastening exercise for the photographer than to study carefully and analyse a portrait by one of the masters of painting. Were we to try to reproduce a similar arrangement by photography, what do we find? Optical limitations which restrict our arrangement of the subject into a very small number of planes, chemical limitations which largely interfere with the correct translation into monochrome of our subject, and, perhaps most insistent of all, limitations imposed by the temperament of our sitters themselves. The capable portrait painter is not oppressed at all by the two former limitations, nor by the last in any like degree with ourselves. He has at his disposal the complete gamut of his palette, and he can render an extended hand so that it shall look like a hand, and not like a fine York ham! He has, generally, a sequence of sittings, during which, if he have any introspective ability, he may learn much of the

character of his sitter, and subtly express what he learns in paint. Sometimes to him it is given, perhaps, to realise those beautiful lines written by the painter-poet, Rossetti, where he says:

"This is her picture as she was,

It seems a thing to wonder on—

As though mine image in the glass

Should tarry when myself am gone.

I gaze until she seems to stir,

Until mine eyes almost aver

That now, even now, the sweet lips part

To breathe the words of the sweet heart—

And yet, the earth is over her."

Surely one of the most beautiful poems, in its entirety, ever inspired by a portrait.

But perhaps we have just one advantage if we work in pure photography—the painter must guard lest his own personality enter into his interpretation of the sitter while he is yet producing what may appear to him a literal portrait. Whistler was once congratulated by an acquaintance on the "wonderful likeness" secured in a portrait of Whistler himself by an eminent foreign artist—a portrait some may remember at a New Gallery exhibition of a few years ago. "Yes," he replied.



On Guard.

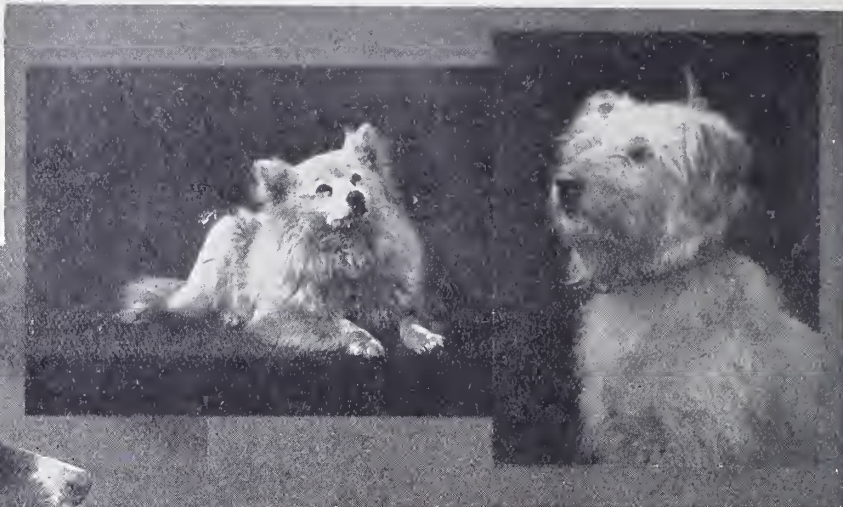
By S. E. Ward.

"it may be very like me, but thank God I'm not like it!" Now, what the painter can spend many hours in obtaining, we have to crystallise—so far as may be—into as many seconds, one brief exposure on a very "sensitive," but absolutely unfeeling, plate, and how can we best set about it?

How often do we hear ourselves compared to those other eminent benefactors of humanity, the dentists? It is a cheerful simile, but not altogether an unfair one. I believe that—*pro* area—the extraction of a tooth is the most severe operation in surgery, and only contemplated after much screwing up of the courage. Well, all too often, a sitter will come to us—Heaven only knows why—with an amazing accumulation of apprehension, sometimes, gently be it spoken, of vanity, to boot, which, if we are to make him appear at his best, or even decently natural, we must somehow strive to remove in the little time at our disposal. And as the dentist will sometimes remark in ingratiating tones,

Rather Thirsty.

By J. Herbert Saunders.



Floss. By W. Henley.

Caspar. By G. S. Hopkins.

"I will just warm the instrument," so we must try to warm our victims to some sympathy with ourselves, or even administer, as it were, a gentle anaesthetic to make him more amenable to his painful surroundings. First, if possible, disabuse his mind of the need for escape into the open at the earliest possible moment, and, if he has brought one, send away his cab! The impatient clamping at the bit and the pawing of the ground of the noble steed, or even the more subdued click of the taximeter as it gaily piles up the twopences, should never penetrate the sacred silence of your studio. Spend a little time in making him feel at home, and awakening his interest in your own side of the problem, and he will begin to reveal a little of his character.

Strive, somehow, to awaken sympathy and interest in the work in hand, for, seriously, sympathy is the keynote of success. I would rather have a sympathetic sitter and a spectacle lens than a callous one with an objective working at 2.5.

Then let us see what we can do without. Men and women, as we mostly know them, don't spend their most characteristic moments holding on to stucco columns, nor do even babies look their best reposing on what are catalogued as "best quality grass mats, pure string only." Remember, our lens is going to insist on recording nearly all we disarrange before it. Oh, for a discriminating objective which would not insist upon what a painter friend of mine happily called "the immortalisation of the accidental." Men and women are interesting enough to me without being enshrined in what looks like the realisation of an illustration—a "cosy corner"—from a

Tottenham Court Road furniture catalogue. Simplify all we can, and our portraits will have more lasting interest. Let what accessories we do employ have some bearing or illustrate in some degree the tastes or characteristics of our sitters.

Only one word more. There seems to be a fallacy abroad among photographers that "breadth" in a portrait is synonymous with fuzziness, or that a "tight" portrait may be made "broad" by the interposition between negative and paper of a sheet of roofing glass or a bit of butter muslin or both. Breadth has nothing to do with presence or absence of detail, provided such details is kept in its place in correct

tone. Go to the National Gallery and look at the Van Eycks. Pictures by men who actually invented a new process of painting specially adapted to the realisation of minute detail. You will find them crammed with detail, but as broad in many ways as a fine Velasquez.

I would like just to say that I am showing no large pictures or great enlargements, for the special reason that I do not think merit in a portrait increases "as the area." The small direct photographic portrait has the chance to become a prized and intimate possession, which, as I think, can never be the case where it is so amplified as to compete with what might have been so much more feelingly rendered by the painter. False textures begin to come in, and destroy the infinite subtleties that the lens and plate can give us, with certain exaggerations, it is true, which you must yourself carefully correct. It seems to me suicidal to give your retouching out to one who has never seen or studied the sitter, and whose knowledge of facial anatomy all too often is only conspicuous by its absence.

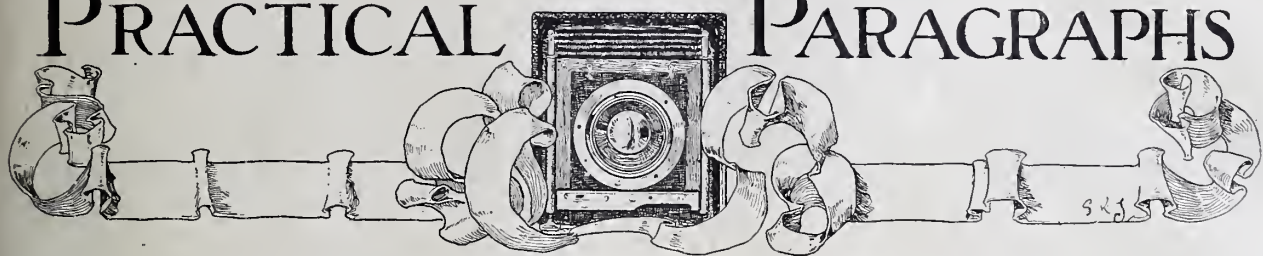
"Satin Surface" Zigo Paper.

ZIGO paper is the self-toning P.O.P. which is manufactured by Messrs. Thomas Illingworth and Co. at their works at Willesden Junction, London, N.W., a paper the merits of which we have dealt with on a previous occasion in these columns.

The makers of Zigo have just added a new grade to those already available, the newcomer having a semi-matt or carbon-like appearance, and being known as "Satin Surface." There is no alteration necessary in the treatment with the new grade. The printing is carried deeply, and a plain hypo bath of a strength of four ounces to the pint is used for fixing. Into this bath the print is placed dry, and gradually changes from the brick red colour which it assumes when first placed in the hypo, through brown to purple. When the tone is that which is desired, the print is washed and dried, and is then finished.

Satin surface Zigo is sold at the same price as the other grades, and will be found quite equal to them in quality of result and ease of manipulation.

PRACTICAL PARAGRAPHS



COPYING PHOTOGRAPHS. When a soiled and crumpled photograph is to be copied, the following preliminary treatment will greatly improve the result. Half an ounce of white wax should be dissolved in four ounces of alcohol by gentle heat. The bottle containing the mixture may be stood in warm water for the purpose. Some of this is then spread upon a piece of swan's down calico, and gently rubbed over the broken creased photograph until it is dry. The print is then placed in a printing frame behind a piece of clear glass, set up at an angle of 45° with the window, and photographed. ("Camera Craft.")

* * *

COPYING GLASS POSITIVES. Glass positives, which many non-photographers believe to be Daguerreotypes, are really negative pictures on glass, made by the wet collodion process, with special pains to keep the image of a white colour. Black varnish was then applied, either to the glass side or to the film, and as a result the picture looked a positive one, just as a negative bleached in mercury to intensify it looks like a positive. It might be supposed that to copy such a photograph nothing need be done but to remove the varnish and print from the negative. But this is not the case. When the varnish is on the film itself, its removal is a very risky proceeding. When it is on the glass side, it may easily be got off, but the resulting negative was neither exposed nor developed to give an image that would print, and therefore will not yield a satisfactory result. The best plan—and one involving no risk at all—is to fix the positive up in a good light and to photograph it just as if it were a print.

* * *

MENDING PORCELAIN DISHES.

Large porcelain dishes are expensive, so that if it is possible to mend them when broken a considerable economy will be effected. This can be done with a mixture of glycerine and litharge, mixing them up to form a very stiff paste. The broken edges are anointed with glycerine, the paste is applied, and they are brought

into close contact and tied up like that for forty-eight hours. The joint will be found to be perfect.

* * *

FROSTING TRANSPARENCIES.

Slides or transparencies which are to be viewed by hand or in a stereoscope have to be backed up by some form of diffuser. Ground glass is generally used, but ground glass, unless very fine, possesses a grain that is distinctly visible, and one that interferes with the finest details of the photograph. A layer of white wax is quite free from grain and gives a beautiful opal-like backing to the transparency. To make it 120 grains of white beeswax are dissolved in 4 ounces of chloroform. The mixture must be kept in a well corked bottle. The solution is poured evenly over the plate, and the solvent allowed to evaporate. The transparency is then put on one side for twenty-four hours, when the wax will have hardened and taken up its full opalescence.

* * *

IMPROVING OVER-EXPOSED NEGATIVES.

The best treatment of an over-exposed negative, it has long been recognised, is to develop it fully, until it is much too dense, in fact, for printing in the ordinary way, and then to reduce it until the shadows begin to clear, finally intensifying. The ferricyanide and hypo reducer is generally employed for the purpose, but an excellent one will be found to be the following:

Liq. Ferri. Perchlor.	...	...	...	1 ounce
Hydrochloric acid	...	...	...	1/4 "
Water	...	...	...	1 pint

The negative should be immersed in this, after it is washed free from hypo, until it is white on the surface, washed for two or three minutes at least under the tap, and then placed in hypo. If one application is not sufficient, the processes may be repeated. It is well to harden the film first. The "Liq. Ferri. Perchlor." can be obtained from any chemist and druggist. The negatives *must* be washed between the hypo and this acid solution.

IMPROVEMENTS IN X RAY PLATES BY WRATTEN & WAINWRIGHT.



MESSRS. Wratten and Wainwright have been giving a great deal of attention of late, we hear, to the improvement of X ray plates, with the aim of making a plate which should possess considerable speed and density-giving power, without the very thick film which is usually necessary. This they now claim to have accomplished.

In a descriptive circular which we have received from them, Messrs. Wratten state that "as a rule X ray plates have been prepared by coating the plate with a very heavy emulsion, so as to produce the maximum amount of silver for stopping the ray. After a number of failures we have found a heavy metal from which a precipitate can be formed in the emulsion along with the silver, and which has the property not only of stopping the ray and transferring it by secondary radiation to the neighbouring silver particles, but of greatly lessening the amount of the secondary radiation in the plate; so that the resultant plates are not merely

fast and capable of giving great density and contrast, but also give appreciably sharper definition in fine detail that can be obtained in an emulsion made of silver bromide only. The precipitate is largely removed in the fixing bath, and has the effect of giving the finished negative a whitish opalescent appearance when looked at, and a yellowish appearance when looked through. It does no harm either for visual or printing purposes, nor is it affected by light, so that it does not lessen the permanence of the negative; it can be completely removed if desired by a bath of weak acid during washing."

The X ray plates are packed singly, a sheet of pure white paper being laid upon the film, and the plate then wrapped in two layers of black paper, so that it can be used just as it comes from the box in which it is sent out by the makers without further protection.

These plates are supplied, half-plate size, 4s. 8d.; whole-plates, 8s. 6d. per dozen; and larger sizes in proportion.



BEGINNERS' COMPETITION.

Open to all photographers who have never taken an award.

PRIZES.

First Prize.—A signed copy of "The Complete Photographer," a half-guinea work by Mr. Child Bayley, now in its second edition.

Second Prize.—A free subscription to *Photography and Focus* for twelve months.

One or more certificates of honourable mention will also be awarded.

RULES.

(1) Each competitor can send as many prints as he likes, but each print must bear on the back the coupon, published each week, the name and address of the sender, the title of the picture, and no other writing whatsoever.

(2) No print will be eligible that is larger than 5 in. x 3 in. (postcard size) or 5 in. x 4 in.

(3) No print must be mounted.

(4) No handwork other than simple spotting is permitted on negative or print, nor shading or dodging of any kind. It is distinctly understood that entry in the competition implies a declaration by the competitor that this rule has been complied with: and in case of dispute the editor shall have the right to call for the negative, from which the entry purport to be a simple direct contact print.

(5) No prints will be returned, and no correspondence with regard to the competition can be undertaken.

(6) The publishers of *Photography and Focus* shall have the right to reproduce, without payment, any of the prints sent in, winning or otherwise. But except the winning prints, the names of competitors of other prints that may be reproduced will not be published without the competitor's consent.

(7) All entries must be addressed "Beginners' Competition," the Editor of *Photography and Focus*, 20, Tudor Street, London, E.C., and must be delivered at that address by the first post on the closing date at the very latest.

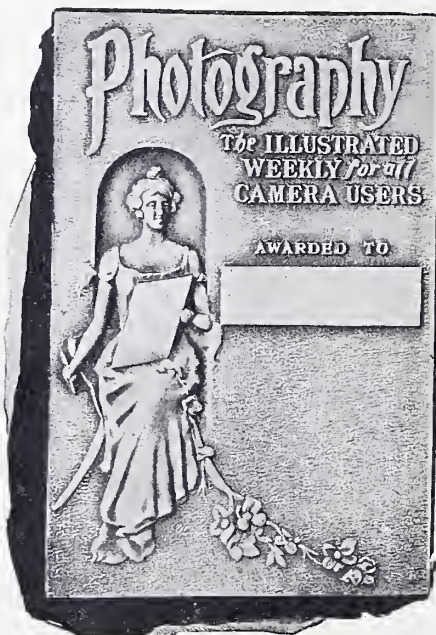
CLOSING DATE.—Tuesday, June 30th.

TITLE COMPETITION.

The result of the title competition, which closed on the 26th inst., will be published in next week's issue.



"Photography" Medal. Actual size.



"Photography" Plaque. Actual size. Weight in silver over three ounces.

ADVANCED WORKERS' PRINT COMPETITION.

PRIZES.

First.—"Photography" Silver Plaque.

Second.—"Photography" Bronze Plaque.

Third.—"Photography" Bronze Medal.

One or more certificates of honourable mention will also be awarded.

RULES.

(1) All photographs must be sent addressed "Advanced Competition," the Editor of *Photography and Focus*, 20, Tudor Street, London, E.C., postage paid, to reach there not later than the first post on the closing date, and must contain a stamped addressed envelope or label (not loose stamps) if they are to be returned.

(2) Each photograph must be mounted, but not framed. Prints in slip-in mounts are not eligible. Each must bear on the back the name and address of the sender and the title of the picture. No letters or other communications must be enclosed with the prints. Every print must bear attached to its mount a coupon for the competition of the month which will be found in each issue of the paper.

(3) Each photograph must be the work of the competitor as regards selection and arrangement of the subject, exposure and development of the negative, and printing, development or toning, and mounting of the print.

(4) The prints which are accompanied by stamped envelopes or labels will be criticised by post, and the editor shall have the right to reproduce any of the prints, winning or otherwise. The awards will be made a fortnight after the closing date.

(5) Awards may be increased or withheld at the absolute discretion of the judge, and in all cases of dispute the decision of the editor will be final.

(6) There is no restriction as to the eligibility, except as set forth in these rules, and except that the same negative must not be used more than once in the competition. That is to say, that a print from it once submitted, all further prints, however varied, are ineligible.

(7) Neither editor nor publishers of *Photography and Focus* shall be held in any way responsible for the safety of prints, or for their return to the competitors.

(8) The sending of a print to the competition will be regarded as a declaration to the effect that it is eligible under these rules, and that the competitor agrees thereto.

CLOSING DATE.—Tuesday, June 30th.

SPECIAL SUBJECT COMPETITIONS. OPEN TO ALL READERS.

PRIZES.

First Prize.—"Photography" Plaque in Silver.

Second Prize.—"Photography" Plaque in Bronze.

Third Prize.—"Photography" Medal in Bronze.

One or more certificates will also be awarded.

RULES.

(1) The subject of each photograph entered must be that announced for the particular competition.

(2) Each competitor can send as many prints as he likes, but each print must bear on the back the name and address of the sender, the title of the picture, and no other writing whatsoever. Each print must have attached to it a coupon for the competition of the month, which will be found in each issue of the paper.

(3) No print must be mounted. No handwork other than simple spotting is permitted on negative or print, nor shading or dodging of any kind. It is distinctly understood that entry in the competition implies a declaration by the competitor that this rule has been complied with: and in case of dispute the editor shall have

the right to call for the original negative, from which the entry purports to be a simple direct contact print.

(4) No prints will be returned, and no correspondence with regard to the competition can be undertaken.

(5) The publishers of *Photography and Focus* shall have the right to reproduce, without payment, any of the prints sent in, winning or otherwise. But except the winning prints, the names of the senders of other prints that may be reproduced will not be published without the sender's consent.

(6) All entries must be addressed "Special Subject Competition," the Editor of *Photography and Focus*, 20, Tudor Street, London, E.C., and must be delivered at that address by the first post on the closing date at the very latest.

SUBJECTS AND CLOSING DATES.

A River Scene. Closes Tuesday, June 30th.

A Plant, or Flower, taken growing out of doors. Closes Friday, July 31st.

A Harvest Scene. Closes Monday, August 31st.



THE LATEST IN APPARATUS & MATERIAL.

The Eastman Plate Developing Tank.

GRADUALLY the amateur photographer is learning the truth first set before him by Messrs. Hurter and Driffield nearly twenty years ago, that it is not necessary to look at his negatives while he is developing them—that, in fact, it is much better not to do so, and that if he would make the best possible negative out of each exposure the extent of development should be a fixed quantity. It takes a long time for so complete a revolution of ideas and methods to permeate the whole photographic world, but the battle of time development has now been won all along the line, and it is very doubtful whether the older methods are practised at all now except by those whose early experiences go back to the pre-Hurter and Driffield days, or who have learnt what photography they know from some similarly antique sources.

The Kodak developing machine and the Kodak tank rest on this sound scientific basis, and soon acquired great popularity. Much of this they owed to the way in which they dispensed with the dark room entirely. The daylight loading cart-ridge could be fed into the developing machine in daylight, and for those who adopted this system the red lamp became useless. While the roll film lends itself to treatment of this kind, plates and cut films do not, and there is no method at present by which either plates or cut films can be transferred to a developing tank in daylight.

Those who have put plates into grooved tanks in the dark room know that it is by no means an easy job to do so without exposing them unduly to the red light. This has always proved one of the most troublesome features of tank development. The other is those curious streamers which are often found on the sky line and in other parts where a sharp line separates a high light from a deep shadow. An excellent example of this defect was illustrated on page 98 of *Photo-*

graphy and Focus for June 9th. The only way to remove all risk of these being formed is to turn the plates upside down twice or thrice during development; and this is a course which we have long followed with all our tank developed plates.

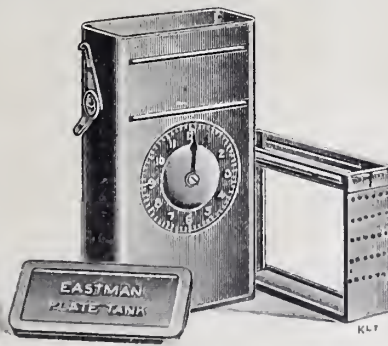
The latest introduction of the Kodak Co., known as the "Eastman Plate Tank," is specially designed to meet both these difficulties. It can be loaded in complete darkness, if desired, without any fumbling with the plates or grooves whatever. Moreover, the tank is hermetically sealed during development, and can therefore be turned upside down as often as is found to be necessary. Let us see how these two ends are attained.

A grooved rack carries twelve plates, back to back, in six grooves. To load this rack it is attached, in daylight, to a wooden frame, and then with the tank and plates it may be taken either into a perfectly dark room or into one with red light. There is, however, no need for the light, and it would be better to do without it. The tank has previously been filled to a mark upon it with developer. In the dark, two plates, placed back to back, are dropped through an opening which is easily felt, in the wooden frame, and they at once pass into the first pair of grooves. A spring is pressed and the top of the frame moved until it encounters a stop. The next pair of plates is then put into the opening, which is now exactly opposite the second pair of grooves. Pressing a spring again, the operation is repeated, and so on until a dozen plates are in the rack. The frame is then detached and the rack of plates lowered into the developing tank by means of a little hooked rod which is attached to it. The rack is lifted up and down once or twice, to expel any air bells, and the cover of the tank is then put on and locked firmly by means of catches provided for the purpose.

The plates are now in the developer, completely protected from light. They are allowed to remain in it for the time required, which will depend on the developer, its temperature, and the make of plate. A clock face on the tank has a loose hand which may be set to show when development is to cease. During the operation the tank should be turned completely over four or five times, so that for about half the total time it is standing on its lid, and the rest of the time on its bottom. When development is complete, the tank must be opened in the dark, its contents poured out, and filled up three times with water. The rack of plates may then be taken out of the tank, which is filled up to the mark with hypo, and they are then lowered into it to fix.

For use with these tanks, the Kodak Co. supply packets of developer, which at 65° Fahr. complete development in 7½ and 15 minutes respectively, with, we presume, the plates made by the company. These are not essential to it, however, and formulæ are given by which developers may be made up at home.

The apparatus is in no way limited to the Kodak plates or developers. It will prove a most valuable tool to every photographer who uses plates at all. Some of our own earliest



work with the tank was done on Imperial plates with the new Watkins developer, timing development strictly by the latest Watkins method. The results were perfectly satisfactory.

There can be no doubt whatever that the principle upon which the Eastman plate tank is devised is a thoroughly sound one, while the way in which it is embodied is of that thoroughly practical character which is seen in all the Kodak productions. It makes plate development as simple and easy as roll film development; we can hardly say more. It does this, moreover, not with any sacrifice of quality, but actually the reverse. A hundred miscellaneous exposures developed in

this way in the tank would not only be done with far less trouble and in much less time than in the old-fashioned method in a dish, but the average of results would be certain to be higher. All risk of finger marks and of light fog is prevented, and the exact point to which to carry development to get the best negative is much more accurately determined.

The tank, which is excellently finished in nickel plate, is made in two sizes, 5 by 4 taking also quarter-plates, and 7 by 5 taking half-plates and plates $6\frac{1}{2}$ by 4 $\frac{1}{2}$. The price of the former is 12s. 6d. and of the latter 16s. 6d.

Rembrandt P.O.P. for Bright Prints from Thin Negatives.

REMBRANDT Special P.O.P., which is made on purpose to give bright clear prints from very weak flat negatives, has already been reviewed in our columns. It was so long ago, however, that we may well be pardoned for referring to it again to point out the remarkable nature of the results which can be obtained on it. These are very well shown by a pair of comparison prints on a showcard which is being issued by Messrs. Walter E. Fischer and Co., of 70 and 71, Bishopsgate Street Within, London, E.C., the British representatives of the maker.

Rembrandt Special P.O.P. is made in three qualities, known as No. 1, No. 2, and No. 3. The thinner and flatter the negative, the higher the number of the paper should be to give a bright print, but in the great majority of cases No. 2 will be found to be all that is required. The higher the

number of the paper, the deeper must the printing be carried; in any case it must go much further than with ordinary P.O.P. Beyond this the treatment of the special paper does not differ from the usual proceeding. If it is toned in a combined toning and fixing bath direct, without any preliminary washing, the most brilliant result will be obtained. If it is well washed for a quarter of an hour and is then toned in a combined bath, the picture will not be quite so brilliant; while if it is toned and fixed in separate solutions it will be still softer. But in any case the print will be far brighter than if it were made on ordinary P.O.P.

We can hardly do better, therefore, than to quote the words of the advertisement and tell our readers not to throw away a negative as being too thin until it has been tried on Rembrandt paper. The result to many will prove a revelation.



DINNER
TIME.

BY
G. W. PENNEY.

Honourable
Mention
"Focus"
Postcard
Competition.

Griffin's New Brushes for the Oil Process.

BRUSHES are the most important part of the outfit of the worker in oil, and it is significant of the increased popularity of the process that brush makers are beginning to cater especially for the oil printer. Messrs. John J. Griffin and Sons, Ltd., of Kingsway, London, W.C., have been identified with the process from its very early days, and are still to the front in providing for the necessities of those who work it.

The Prima brush is a hoghair tool, made of specially selected hair, prepared for the purpose, and mounted in a handle designed to enable the brush to be held and used with comfort. The No. 2 size brush sells at 1s. 3d., No. 6 at 1s. 9d., and No. 10 at 3s.

The Gradator is a fitch-hair brush for the general work of pigmenting, and one which is very well designed for its purpose. It possesses a novel feature in a metal sleeve, which

slides up and down on the ferrule and serves a twofold purpose. It not only protects the hairs of the brush when not in use, but by being slid partially over them, allows the oil printer to control the stiffness or softness of the hairs at will. This power, we would suggest, would be still more at the disposal of the photographer if Messrs. Griffin could see their way to provide some means for holding the sleeve in any selected position. Perhaps in the future something of this sort may be provided for us. It would certainly enhance the value of the brush as a tool for oil printers.

The price of the Gradator brushes is 1s. 6d. in the No. 2 size, 2s. 6d. in the No. 6 size, and 5s. in the No. 10 size. These brushes, specially designed as they are for this particular process, are just what the oil printer who uses the "hopping" or Rawlins method wants, and are certain to become widely used.



CHIN.

BY RALPH CROMPTON.

Awarded the Silver Plaque, first prize in the Special Subject Competition.

A Note on the Buying of Costly Lenses.

We are asked from time to time whether we think that the present high prices of the best anastigmats will be maintained—whether, in fact, a photographer who pays several pounds for a lens to-day may expect to get as much for it, second-hand, in three or four years' time, let us say, as he might expect to get for it, second-hand, at the present time. We are not fond of attempts at prophecy, but at the risk of breaking the wise rule, "Never prophesy unless you know," we will give our own opinion.

The advent of the anastigmat brought about a regular slump in the higher-priced rectilinears, but that is the only notable general change in lens values that recent years have seen. The general tendency of competition and of improved methods of manufacture is

to lower prices, but we do not think that this is likely to depreciate the value of the highest-priced lenses of to-day in the near future. After all, the prices are largely justified by care in manufacture and in testing; and this is a quality which cannot be indefinitely cheapened, and will always fetch its value. We think, then, that a photographer who, in paying a long price for a very high quality of lens to-day, does so with the thought that if he should want to sell it in two or three years' time he will get back a reasonable proportion of the price he has paid for it, has good justification for the belief that is in him. In the meantime, he has the advantage of the use of a first-rate instrument.

The Dog, Cat, or Parrot Competition.



MOST of our illustrations this week have been selected from the prints sent in to the special subject competition for May, when the subject set was a dog, cat, or parrot. The last was inserted in the interests of those who might find that rather uncanny bird a more easily obtainable sitter. Only a few of the competitors cared to tackle parrots, and of the few sent in most were unsuccessful from under-exposure. In this respect Mr. Pabbington's "At peace with all the world," which was awarded a bronze medal, and is



Nestlings. By H. R. Row.

"At peace with all the world." By William Pabbington (Bronze Medal).

reproduced on this page, was one of the best, catching as it does quite a characteristic pose.

Dogs, as was only to be expected, proved the favourite models, and fully justified their high reputation as sitters. Here again much of what was in other respects good work was spoilt by under-exposure, with, as a result, a complete loss of texture in the coat. No excellence of pose or expression can make up for a defect of this character. The dog is, or should be, docile enough to allow of an

ample exposure being given to render his coat faithfully; and when it has not been done, there is nothing for it but to put the print on one side as a failure.

A great many excellent cat pictures figured in the competition; and, we take it as a testimony to the care with which "the Critical Causerie" is studied, that the "picture postcard kitten" upon which "the Bandit" was so severe a few weeks back was conspicuous by its absence. The cat pictures were notable for their freedom from would-be-funny poses and accessories, and in their way were as successful as those of the dogs. Although, judging by the prints, some of the entries were from readers who have turned their attention to such subjects before, we hope and, indeed, we know, that in many cases this was not so, and that the "Special Subject Competition" has done what it was intended to do, and has turned our readers' attention to subjects for the camera which hitherto they had not attempted; and some of these have been numbered amongst the winners in the competition.



Kitten

By Laura Mackie.

Imperial P.O.P.

A
Popular
Brand.

Unrivalled
in brilliancy,
in wealth of detail,
and delicacy of tones.

Imperial P.O.P.

THE IMPERIAL DRY PLATE CO., LTD.,
CRICKLEWOOD, LONDON, N.W.

BUSINESS NOTICES.

OFFICES.—20, Tudor Street, London, E.C. Telegrams: "Cyclist, London." Telephone: 5610 and 5611, Holborn.

PUBLISHING DATE.—PHOTOGRAPHY AND Focus is on sale throughout the United Kingdom every Tuesday morning.

SUBSCRIPTION.—PHOTOGRAPHY AND Focus will be forwarded regularly at the following rates:—
GREAT BRITAIN. ABROAD.

Twelve Months ..	s. d.	Twelve Months ..	to 10
Six Months	3 6	Six Months	5 5
Three Months ...	1 8	Three Months ...	2 9
Single Copy	1½	Single Copy	2½

REMITTANCES.—Postal Orders, Cheques, etc., should be crossed and made payable to Iliffe and Sons Limited.

ADVERTISEMENTS.—All communications on advertisement matters should be addressed—The Advertisement Manager, PHOTOGRAPHY AND Focus, 20, Tudor Street, London, E.C. All copy for displayed advertisements for the issue of any particular week must reach Tudor Street by the first post on Monday morning in the week previous.

PREPAID ADVERTISEMENTS.

SALE AND EXCHANGE (for Amateurs only).—1d. per word, minimum 6d.

PROFESSIONAL AND TRADE.—Three words 2d., minimum 1/-.

All advertisements to be inserted on these terms must be accompanied with remittance. To ensure insertion, letters should be posted in time to reach the offices, 20, Tudor Street, E.C., not later than first post on Wednesday.

BOX NUMBERS.—For the convenience of advertisers, letters may be addressed to numbers at the office of the paper. When this is desired, 2d. will be charged for registration, and three stamped and addressed envelopes must be sent for forwarding replies. Only the number will appear in the advertisement. Replies should be addressed, "No. 000, c/o PHOTOGRAPHY AND Focus, 20, Tudor Street, London, E.C."

DEPOSIT SYSTEM.—Persons who hesitate to send money to unknown persons may deal in perfect safety by availing themselves of our Deposit System. If the money be deposited with PHOTOGRAPHY AND Focus both parties are advised of this receipt, and upon intimation of the arrival and acceptance of the goods, the money is forwarded, less a charge of 1/- for registration. The time allowed for a decision after receipt of the goods is three days. For all transactions exceeding £10 in value, a deposit fee of 2s. 6d. is charged. Cheques and money orders should be made payable to the Proprietors, Messrs. Iliffe & Sons Limited, and addressed to them at Coventry.

PUBLISHING NOTICE.—Communications for the Publishers should be addressed, Iliffe & Sons Limited, 20, Tudor Street, London, E.C.

EDITORIAL NOTICES.

ADDRESSES.—All communications for the Editor should be addressed: The Editor, PHOTOGRAPHY AND Focus, 20, Tudor Street, London, E.C.

TO CONTRIBUTORS.—The Editor will be glad to consider original up-to-date manuscripts on photographic subjects. All contributions must be typewritten, or in very legible handwriting, on one side of the paper only, and should bear the name and address of the sender. Letters or communications arising out of matters already appearing in the paper are not paid for. The Editor disclaims legal responsibility for the safety of matter submitted to him, but he will endeavour to return rejected manuscripts, etc., when a stamped addressed envelope is enclosed for that purpose. No notice whatever can be paid to communications without the name and address of the sender, not necessarily for publication.

PRINTS FOR CRITICISM.—Readers sending prints for criticism or advice are notified that in all cases it is understood that by so doing permission is given for their reproduction, without fee, in PHOTOGRAPHY AND Focus.

PRINTS FOR REPRODUCTION.—Reproduction fees are only paid by arrangement beforehand. The sending of a print, without any condition stated, will be taken as permission to reproduce it without fee. The Editor will be glad to consider for publication, with or without letterpress, photographs of special interest, on terms to be arranged.

PAYMENTS.—Articles and illustrations are paid for on acceptance.

INTERVIEWS.—The Editor will be at 20, Tudor Street, on Wednesdays, between the hours of 9.30 and 11.30 a.m., but can only be seen at other times by appointment.



THE OXFORD CAMERA CLUB at its last meeting made a presentation to Mr. G. W. Norton, who has just resigned the honorary secretaryship after holding it for eleven years.

CARAMEL with a finely ground black or brown pigment—burnt sienna answers very well—is at once the cheapest and most efficient backing.

LEIGH PLACE, SURREY, was to have been visited by the Photographic Survey and Record of Surrey on Saturday last, under the guidance of Mr. Hector Maclean.

DEVELOPMENT STAINS. Mr. P. Groves, of Pulborough, writes, "I have seen a formula for taking out stains produced by prolonged or forced pyro development. I beg to say that I have entirely done away with this defect by first thoroughly washing the negative after fixation, and directly it is quite dry rubbing the film with a pad of cotton wool well soaked in methylated spirit. This has always been successful with me, but I have not left it until later than directly the negative is dry, so cannot say whether it is successful after some time has elapsed."

Books for Photographers. .

Science and Practice of Photography.

By CHAPMAN JONES, F.I.C., F.C.A., F.R.P.S.
Price 5/- nett. Post free 5/4.

Instruction in Photography.

By SIR WILLIAM ABEY, K.C.B.
Price 7/6 nett. Post free 7/10.

Practical Orthochromatic Photography.

By ARTHUR PAYNE, F.C.S.
Price 1/- nett. Post free 1/2.

Successful Negative Making.

(Illustrated.) By T. THORNE BAKER, F.C.S., F.R.P.S.
Price 6d. nett. Post free 7d.

All About Enlarging.

(Illustrated.) By C. WINTHORPE SOMERVILLE, F.R.P.S.
Price 6d. nett. Post free 7d.

Photography Made Easy.

(Illustrated.) By QUI-VIVE.
Price 6d. nett. Post free 7d.

Lantern-slide Making and Exhibiting.

(Illustrated.) By JOHN A. HOGES, F.R.P.S.
Price 6d. nett. Post free 7d.

Pictorial Landscape Photography.

(Illustrated.) By J. C. WARBURG.
Price 6d. nett. Post free 7d.

A full list sent on receipt of a postcard.
ILIFFE & SONS LTD.,
20, TUDOR ST., LONDON, E.C.

DEATH OF MR. HENRY LOMB. We regret to hear, by cable, of the death on June 15th of Mr. Henry Lomb, of the world-famed firm of Bausch and Lomb, of Rochester, U.S.A.

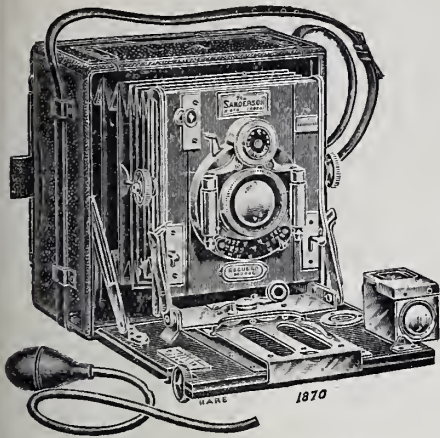
THE MELBOURNE CAMERA CLUB has just been formed at Dulwich. Admission fee 1s., quarterly subscription 1s. The honorary secretary is Mr. P. Fredk. Visick, of 110, Melbourne Grove, East Dulwich, S.E.

A CORRECTION. We are asked by Messrs. Staley and Co. to point out that there was an error in their advertisement of the 1908 Reflex cameras. The price of the quarter-plate camera is £12 12s., and of the 5x4 £13 10s., and not as stated.

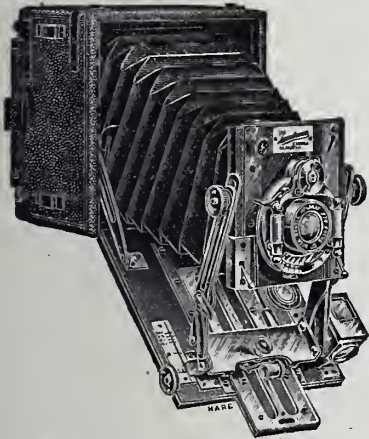
MODIFYING THE DEVELOPER. If in the course of development the photographer wishes to modify his developer, or to add a little more of the concentrated solution to it, he must on no account pour it straight into the dish. Liquids do not mix instantly, and the fresh addition coming into contact with part of the plate might ruin the negative. The fresh solution should be put into the measure, the dish emptied into it, and then the contents of the measure poured over the plate.

THE FIRST SNAP SHOT. A very early instantaneous photograph by G. W. Wilson, of Aberdeen, taken in 1856, is on view at the Scottish National Exhibition at Edinburgh. It is certainly one of the earliest of its kind, but the well-known and often reproduced instantaneous daguerreotype of New York Harbour, taken by W. England in pre-colon days, would certainly seem to be entitled to the credit of being the very first "snap-shot." The Edinburgh exhibition is very rich in the historical side of photography, as is only fitting in the city of Hill and Adamson.

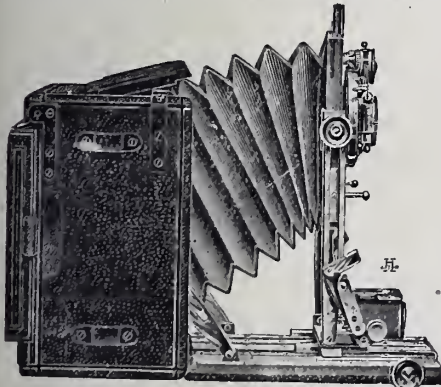
SOME FACTS CONCERNING LIGHT was the title of a lecture given by Mr. Allen Baguley, B.Sc., before the Lime Street Brotherhood Camera Club, Preston. Mr. Baguley explained that light is a form of energy, convertible quantitatively into other forms. Newton's corpuscular theory has been displaced by the wave theory. Waves generally are of two kinds—those in which the particles of the conducting medium move in the same direction as the wave motion, and those in which they move at right angles to this direction. Light belongs to this latter class. Heat waves and Röntgen rays are of the same character as light waves, and move at the same velocity through space. The other which is the conducting medium in space consists of infinitely fine particles. The familiar phenomenon of refraction is the result of variation of velocity due to passage from one medium to another of different density. Light is itself invisible, though it renders objects generally visible. Things do not themselves possess colour. This property is imparted to them by light.



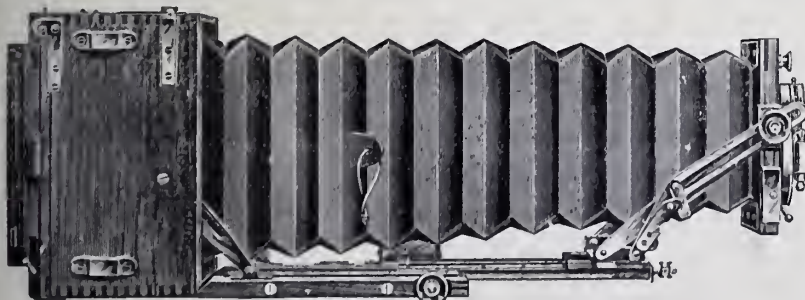
This is a Sanderson with the Lens in the normal position.



Here the Lens has been dropped by means of the Sanderson Front to get an excess of foreground.



The Lens can be raised by the Sanderson Front to give an excess of sky.



Pictures may be doubled in size by extending the Sanderson Front and removing the front part of the Lens.

Why the "Sanderson" is so very much better than other Cameras.

The Sanderson Universal Front is a patent, or rather a series of patents, any one of which would be useless without all the others. The Sanderson Front is called Universal because it rises, falls, recedes, extends, or swings in a perfect arc at the will of the operator. Yet it can be locked rigidly and instantly in any position.

Then again the Lens is swung on its axis and the locking nuts that control its movements are fitted at the end of the axial pins.

Each of the swinging Arms that carry the Lens front have one single slot that goes through in their entire length, and in these slots the axial supports of the Lens can pass freely up and down, backwards or forwards, always preserving its balance, and ready to be locked rigidly in any position by a single touch. All these wonderfully simple movements are patented.

The great point to remember is that in buying a Sanderson you are getting the finest, most famous, and most useful Camera that the world produces.

You are buying a most beautifully made Camera, one that will serve you well and can always be absolutely depended upon. You are buying a Camera with a reputation that is above reproach.

There are Field Cameras and Hand Cameras in the Sanderson series, and the prices range from

£4 4s. to £31 12s. 6d.

Call at any good Photographic Dealer's and ask to see a "Sanderson."

Write for a booklet (stating whether you want a Hand or Field pattern) to the manufacturers:

HOUGHTONS

The largest manufacturers
of Cameras in the Kingdom,

**88/9, HIGH HOLBORN,
LONDON, W.C.**

AT THE EDINBURGH PHOTOGRAPHIC Society's annual meeting the following officers were elected: President, J. F. Duthie; vice-presidents, H. Stewart Wallace and R. C. Malcolm; honorary secretary, J. S. McCulloch; treasurer, John B. Peden; survey secretary, James Oliver; curator, John Anderson.

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FRENCH TRADEMARKS AND TRADE NAMES. The house of Mendel, of 118, Rue d'Assas, Paris, has just published (price 3fr. 50c. in paper covers) a book of 150 closely printed pages giving the trade names and trademarks of photographic apparatus on the French market.

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THE BLUE BOOK is the official annual of the Scottish Photographic Federation, and is edited by Mr. John B. MacLachlan, of Blairgowrie. One of its most conspicuous features is its gazetteer, and list of local reporters who will provide information about their districts on application. The list of societies shows that the Federation is growing steadily in strength and importance, and as a national union of societies its influence must be all for good.

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MOUNTS of not too aggressive design, and of tasteful tints, have been submitted to us by the Crown Manufactory, Rotherham. The "Osborne," for example, is supplied in white, green, and brown, with an embossed plate mark, costing 3s. 3d. per 100 in cabinet size. The "Rembrandt" costs 4s. 11d. per 100, and is more florid in its design, but will no doubt appeal to many. This latter takes oval pictures, and can also be in the slip-in form supplied at 6s. 6d. per 100.



Chris,

By S. E. Ward,

Awarded a Certificate in the Special Subject Competition.

THE PHOTOGRAPHIC CATALOGUE of Messrs. Boots, Ltd., in addition to particulars of cameras and all apparatus and material for the amateur photographer, has a "literary section" in which a great deal of very interesting and useful reading matter is to be found. This is certainly a catalogue to be got and studied.

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THE RAJAR CAMERA, offered monthly by Rajar, Ltd., for the best prints on Rajar P.O.P., has been won by A. Bough, of 106, Bowyer Road, Saltley, Birmingham, on paper purchased from Hurman, Ltd., Victoria Square, Birmingham.

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A DIRECTORY OF PROFESSIONAL PHOTOGRAPHERS in France has just been published under the title of "Annuaire des Photographes Professionnels, 1908," by Chas. Mendel, of 118, Rue d'Assas, Paris. The lists are divided into five sections for easy reference, giving the names in Paris, Provincial France, the French Colonies, Belgium, and Switzerland respectively. The price of this useful book is 1 franc 50c. in paper covers.

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STEREOSCOPIC AUTOCHROME PICTURES, taken in the Verascope—that most ingenious and beautifully constructed camera made by Jules Richard—are now to be seen at the House of the Royal Photographic Society, 66, Russell Square, Bloomsbury, London, W.C. The collection numbers about a hundred and fifty, and is on view free of charge daily, 11 a.m. to 5 p.m., except on Saturday, when the time is 11 a.m. to 2 p.m.

THE REPLIES TO CORRESPONDENTS

REGULATIONS.—(1) Envelopes must be marked "Query," and the "Enquiry Coupon" found elsewhere must be enclosed. (2) The full name and address in addition to a *nom-de-plume* must be given. (3) Only one question on one subject is allowed in each letter. (4) Prints may be sent for criticism, but a separate coupon must be sent with each print, and a stamped addressed envelope (not loose stamps) for their return. Queries are dealt with in strict rotation in the order received. Only "Urgent Apparatus" queries will be dealt with by post, for which purpose a stamped envelope must be enclosed.

THE WEEK'S QUERY.

DISTANCES IN ENLARGING.

Is there any rule as to the distance an enlargement must be from an enlarging lantern to get a picture of some predetermined size?—F. S. DEWAR.

Certainly there is, the governing factor being the focus of the lens in the enlarger. First, the degree of enlargement must be ascertained by dividing the length of the base line of the enlargement by the length of the same base line on the original negative. By adding 1 to the number so obtained and multiplying by the focus of the lens, we get the distance of the centre of the easel from the lens. By dividing this distance by the degree of enlargement we get the distance of the lens from the negative.

Example.—A quarter-plate negative is to be enlarged with a 5in. lens on to a piece of bromide paper three times its width ($4\frac{1}{2} \times 3\frac{1}{2}$ to $12\frac{1}{2} \times 9\frac{1}{2}$). The degree of enlargement is therefore 3. Adding 1 we get 4, and multiplying this by the focus of the lens, 5, we get 20. The paper is therefore 20 inches from the lens. Dividing 20 by the degree of enlargement, 3, we get $6\frac{2}{3}$. The lens is therefore $6\frac{2}{3}$ inches from the negative in the enlarger.

REPLIES IN BRIEF.

AMATEUR (Strone).—Certainly not in the United Kingdom.

MISS MORDAUNT (St. Jean de Luz).—We are glad to hear that the mystery is explained.

J.G.W. (Oxford).—We have not tried all, so cannot compare them; but found 2 and 4 perfectly satisfactory.

H. J. BOWMAN (Newport).—The No. 1 Blocknote with Zeiss Tessar lens is beautifully made, and quite in the very front rank of photographic apparatus.

W. J. LARKHOEN (West Ealing).—R. and J. Beck, Ltd., 68, Cornhill, London, E.C., and A. E. Staley and Co., 19, Thavies Inn, London, E.C., undertake it.

H. HOLLAND (Northwich).—We cannot understand the formula at all; it is certainly not a combined toning and fixing bath, and the prints would have to be fixed subsequently.

C.S. (Kentish Town).—There is no way by which the prints can be improved. Clearly they required printing much more deeply; sufficient has not been allowed for the reduction which is inevitable in the hypo bath.

*SIMPLEST
PROCESS*

GOLDONA

*THE PAPER
THAT REALLY TONES
WITHOUT A TONING BATH*

*PERMANENT
RESULTS*

*The
STAR
OF THE
PHOTOGRAPHIC
WORLD*

*GLOSSY.
MATT.
SATIN.*

ASK YOUR DEALER FOR A SAMPLE TO-DAY

SOLE MAKERS. GRIFFIN'S, KINGSWAY, LONDON.

Write for particulars of GOLDONA COMPETITION. 23 CASH PRIZES.
PLEASE MENTION "PHOTOGRAPHY" WHEN CORRESPONDING WITH ADVERTISERS.

SILVER ROSE (Exmouth).—Many thanks for the suggestion, which shall have our attention.

CELLONIA (Goodmayes).—We have tried to find out how it is done, but have been able to get no data.

J. LAWRENCE SMITH (Kensington).—We should say the negative had at least four times the exposure it required.

LEEPPER (Battersea).—We should communicate with the maker: our own experience has been too limited for us to give you a reply. Many thanks for your good wishes.

A. E. SLOCOMBE (Wandsworth).—Many thanks for your friendly letter, which we fully appreciate, and which we believe to be just. Temporarily, the matters referred to are an unfortunate necessity.

E. J. ROGERS (Orpington).—P.O.P. if first hardened with alum or formalin may be enamelled in the same way as collodion paper. For details see "The Photographic Reference Book," price 1s. 6d. nett, or post free from our publishers 1s. 8d. (page 247, etc.).

ALPHA (Ashton-on-Mersey).—Measure the distance from the slot to the ground glass, when an object two or three hundred yards away is sharply focussed. Divide it by the diameter of one of the stops and you will get the F number of that stop near enough for all practical purposes.

N.S.T. (Winchester).—The process known as Sterry's process is not restraining, but an alteration of the gradation throughout. It can be applied to gaslight paper; but sulphide toning after it does not usually succeed very well. Full particulars were in *Photography*, September 3rd, 1907, page 199.

MAJOR BROWNING (Tipperary).—If the pyro solution is going to be used at once, a preservative is not necessary. The sulphite, generally given as part of the No. 2 or carbonate solution must be used, or the plates will be stained by the developer. Some few workers like such stained negatives.

F. T. GODWIN (Croydon).—Thanks for your good wishes. The principal fault seems to be very great underexposure; but as for the smile, it is clear you did not keep it on long enough. We should try again, giving eight or ten times the exposure, and arrange some sort of reflector for the shadow side of the face.

HIBON (Kilburn).—You cannot make it a good negative, but you can make it print more quickly by reduction in ferricyanide and hypo or persulphate, the former if it is overexposed, the latter if it is correctly exposed and only overdeveloped. See "Intensification and Reduction" reply to "Clothes-horse."

S.G. (Nottingham).—Underexposure, together with light reflected from the bellows, is at fault. It will hardly be noticeable when exposures are full, hence the makers' remarks. A longer hood to the lens will help to keep it down. The edges are really light-fogged, the dark centre being the unaffected part of the plate.

CLOTHES-HORSE (Westgate-on-Sea).—If the negatives are too thin for contact printing, they may still yield good enlargements. If not, there is nothing for it but to intensify them. "Intensification and Reduction," by H. W. Bennett, price 1s. nett, or post free 1s. 2d. from our publishers, will give you full particulars of many methods.

WANTON (Leeds).—The lens is not at fault, nor the backing. It is a question of exposure and development. The exposure must be correct, development rapid and unrestrained, and must not be pushed too far. The third print shows this. Although an equally trying subject, the same lens and plate have given a result quite free from halation.

A. JUDE (Birmingham).—Liquid sodium bisulphite is a commercial solution of sodium bisulphite readily obtainable in France, not so easily in this country. The Lumière N.A. Co., 89, Great Russell Street, Bloomsbury, and Messrs. Johnson and Sons, Cross Street, Finsbury, supply it, to our knowledge. A saturated solution of potassium metabisulphite is not the same thing, but may be substituted for it, if the bisulphite is not obtainable.

J. SKINNER (Lavender Hill).—We expect you would be able to find at one of the big dealers a tripod, the legs of which would fit the turntable on your camera; but cannot answer more definitely. Not having seen your turntable and telescopic tripod we cannot say whether it would be possible to fit them or not. In any case it would seem to be a job for a camera maker, and would probably cost as much as, or more than, a new set of legs for the camera you have.

TROUBLED (Batham).—The print has all the appearance of a much underexposed plate, yet at f/6 it should have been fully exposed with 1-50th second, and that the exposure was not much less is shown by the cyclist. We suspect improper development, insufficient development perhaps, or fogging of the plate by light. It is not the lens, nor the shutter, nor we think the exposure, nor the make of plate. Why not get one of your friends to develop one of your plates? Or try developing for much longer, and, if no better, send us a negative.

GRIFFON (Richmond).—If the Daguerreotype has faded nothing will restore it; but if it has only tarnished it may be possible to brighten it again. It must first be rinsed once or twice in distilled water, and then be placed in a clean hypo bath, two ounces to the pint, for a couple of minutes, and then again rinsed. A solution of ten grains of potassium cyanide (highly poisonous) in an ounce of water may be poured over it once or twice, and it is then again rinsed in distilled water, and dried over a spirit lamp. Nothing but liquid must at any time touch the surface; and in any case there is always a great risk of the complete destruction of the picture.

RAUCOUS (Tiverton).—There is no such process.

A. NOVICE (Walthamstow).—Either would be very suitable.

C. LUCAS (Clapham Common).—We shall be pleased to reply to any specific enquiries.

N. W. OSBORNE (Brixton Hill).—We are much obliged to you for the suggestion, of which we will not lose sight.

THERMO (Gloucester).—"Focus Thermometers" are now supplied by Houghtons, Ltd., 88 and 89, High Holborn, W.C.

MISS AMBLER (Bradford).—There is nothing to do to claim the paper; it will be sent to you, week by week, free by post.

BAYSWATER (Bayswater).—Many thanks for your suggestion; were it possible to adopt it the need for it would never have arisen.

A.F.B. (Battersea).—The paper is sized by the maker; the photographic manufacturer only coats it with the emulsion. See rule 3 above.

D. E. BERNARD (Bristol).—The index to *Photography*, Vol. XXV., can be obtained free on application to our publishers, enclosing stamped addressed wrapper.

C.M.R. (Enniskillen).—The mark in the sky is where the developer did not cover the plate at first, and the round spot is probably due to the same cause.

FOURVIEW (Stackstead).—Certainly you are liable if the pictures have been copyrighted. Whether you choose to run the risk you must decide for yourself.

BLACK LAWN (West Kensington).—The circular patch is a flare spot, due to a defective lens. No lens should give it on such simple subjects as these, and the instrument should be sent back to the makers.

A. O. PARSONS (Newcastle-on-Tyne).—There is no way of regulating such a shutter, which is made to be used only at its one speed, whatever that may be. Report will be sent on receipt of a stamped envelope.

GREEN (Liverpool).—(1.) We are not aware that it is on the market; and, if wanted, you will have to make it yourself. The procedure given on pages 142 and 143 last week should answer (2 and 3). See rules above.

LEALHOLM (Bramhall).—The markings are exactly like those obtained on plates when the tank is not turned upside down often enough during development; and we should attribute them to the same cause.

W. WALTERS (Harlesden).—All depends on the regulations of the particular place. The best plan would be to write the Town Clerk, enclosing a stamped envelope, and asking for particulars of the bye laws in force.

G. C. THOMPSON (Rock Ferry).—There is no cure for such marks. It has been suggested as a remedy for drying marks, and is, we believe, effective. But marks due to uneven action of the developer are irremediable.

MISS AMY ELLIS (Exeter).—Many thanks for the prints, which we are sorry we cannot use. By the way, the exposure of the negative has been very much too short to give a good result. Four times as long would have been none too much.

LEGIS (West Kensington).—We believe the lens and shutter to be of fair quality, but have no actual experience of either. The lot seems good value; but unless the purchaser knows enough to test what he thinks of buying, it is better to get new goods from a responsible dealer.

E. H. MANN (Kennington).—The lens you propose to get is excellent value for money, and will do what you require. There are, no doubt, lenses that cost more money and do not work so well; but, generally speaking, the price of a lens may be taken as proportional to its capacity.

VERONICA (Winchfield).—It seems a particularly unsuitable place for keeping chemicals of any sort; not that most of them would deteriorate, a good many would not, but that none would be at the normal temperature when they were wanted for use. We should reserve the shelf for measures, dishes, or other apparatus of that kind.

VOLUNTEER (Charlton).—We should take whatever you are accustomed to in the way of plates. We are afraid we cannot tell you the stop and exposure to use in the Mediterranean and Black Seas in July and August. The only way to avoid disappointment and waste is to get an exposure meter and learn to use it before starting.

CAMERON (Preston).—This seems to be the case for some expert help; we should ask your dealer to look at it. You may be quite sure that neither the calculation nor the plate is at fault. We do not see that we could do more than tell you if the plates were correctly exposed or not; but if that would be any help we should be glad to do so.

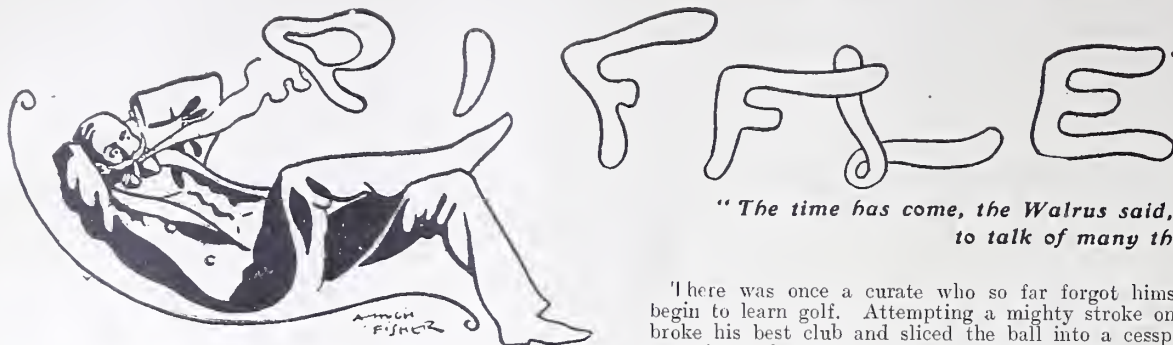
W. H. SIMPKINS (Devizes).—To make up a combined toning and fixing bath dissolve in a pint of hot water, in the following order, hypo 5 ounces, citric acid 60 grains, lead acetate 60 grains, ammonium sulphocyanide 240 grains. Heat it to boiling for five minutes and then set it aside to get quite cold. Filter the liquid and add three grains of gold chloride dissolved in an ounce or two of water.

GREENHORN (Claygate).—If the prints are on gelatine P.O.P., bromide, or gaslight, mounted with starch or paste, they must be soaked in cold water for three or four hours, and then the mount very carefully stripped off a little at a time. Warm water will at once spoil them. Platinum, albumen, collodion-chloride, and plain paper prints, after the soaking in cold water, may be put into warm to facilitate the stripping.



WELLINGTON
CARBON
P. O. P.

From a Negative on a "WELLINGTON" SPEEDY PLATE.



THIS amalgamation of two papers into one is a bit of a nuisance. Those who used only to read *Focus* and never saw *Photography* (poor things) are, of course, quite unaware of the fact that their paper used to provide me with plentiful texts for this page. Many a glorious swipe did I have at the red-covered one, and many and many a time did I hold my hand and refrain from smiting. It was not altogether my fault that I smote even as often as I did. I am a peaceful chap when I am let alone. But *Photography* readers used to deluge me with cuttings from *Focus* marked with blue and red pencils and with rude remarks written in the margin, and they used to egg me on to the assault, even as a terrier is urged to the destruction of a poor cat.

* * *

What am I to do now? To have a dig at *Focus* is like punching my own head. But I can't get out of my bad habits all in a moment, and I shall still consider anything fair game that I find between red covers. Wherefore I gleefully welcome something which a reader has pointed out to me in the article on the tank development of roll film. I even forgive him for the atrocious remark, "If you can clear this up you will film me with gratitude."

* * *

Well, the writer of the article used as an illustration a picture of a white fountain with a big black blob on it, and observed that on the film this black blob was "practically clear glass." The reader wants me to explain how film is converted into glass. The explanation is, that it isn't. The writer does not say so. The word "practically" saves his bacon.

* * *

The patch of clear film is, for all practical purposes (printing, to wit), the same as a patch of clear glass on a plate. We must guard against unduly restricting the application of a word. Some pictures are said to be "glazed" with transparent celluloid. I suppose our friend would ask how you can glaze with celluloid. Why, very likely the glasses in his spectacles (if he uses them) are pebbles, and the diamond in his ring (if he has one) may be glass. Is my friend satisfied? How dare he ask me to suggest that anything appearing in this paper could by any possibility be wrong to the slightest extent? The suggestion is absurd, positively unthinkable. If it had been in *Focus*, now, the case might have been different. But it is quite possible for a paper to be righteous even in a red cover.

* * *

And now I want a word with the unprincipled bandit who writes the "Critical Causerie." I am free to admit that he is a genius, and that I have had great joy of his writings. He reminds me sometimes of a character in one of my favourite books—a chap who caused much merriment in his native alley by entering into the thick of a riot armed with a roll of newspaper with which he smote all within reach. In his playful way, before he began operations he had rolled a length of iron pipe in that newspaper. Even so the bandit will lay out some harmless beginner with an apparently kind and friendly criticism.

* * *

But what I want to tell the bandit is that I will not have him take my name in vain. He made a very rude remark about photographers recently, and then crawled out of it by adding "as the Walrus would say." Now that's not good enough, even for a bandit. I never make rude remarks. (What, never?) Well—hardly ever.

"The time has come, the Walrus said,
to talk of many things."

There was once a curate who so far forgot himself as to begin to learn golf. Attempting a mighty stroke one day he broke his best club and sliced the ball into a cesspool. For ten minutes he revelled unrestrainedly in the most uncanonical language ever heard even on a golf links. He then paused for breath, took off his hat, wiped his perspiring brow, pulled his collar straight, and observed, "As that wicked Captain Blazes would have said."

* * *

Does the bandit take my meaning?

* * *

A reader sent the editor a reproduction of a cricket photograph, and asked him to submit it to his best authority on optics. The editor naturally sent it to me. I rashly promised to make a drawing of it, and explain the thing. But I fear that readers would not be able to understand my explanation, and I am perfectly sure I should not understand it myself.

* * *

Judging by the height of the cricketers the wickets are placed about twenty feet apart instead of twenty-two yards, and the spectators are apparently so close to the pitch that a mild snick to leg would mow them down in hundreds. The batsman, the wicket-keeper, and the man at point could kiss each other without moving, and the batsman could easily tell if the bowler had been eating onions.

* * *

I really don't see why I should be expected to explain and justify these curious results. I didn't take the photograph. In the good old days when I did take a photograph of a cricket field it came out naturally. The field looked about the size of Europe, and the players were little white dots that could only be seen under a powerful microscope. Such a photograph was useful.

* * *

It could be used for any match.

* * *

All you had to do was to give different names to the little white dots and nobody was any the wiser. But nowadays people expect to be able to distinguish between the umpire and the pavilion. They want to see which is which. Hence photographers use a telephoto lens, and we get the silly results to which I have referred. The telephoto lens ignores relative size and annihilates distance. I once saw a telephotograph of Nelson on top of his column in Trafalgar Square. The picture actually showed a chimney pot so close to him that Horatio could have seen down it into the fireplace even with his blind eye. And if telephotography can do that it is no wonder that it makes a mess of a cricket field.

* * *

How's that, umpire?

THE WALRUS.

SUBSCRIPTIONS.

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PHOTOGRAPHY

A JOURNAL FOR EVERY CAMERA USER.

EDITED BY R. CHILD BAYLEY.

PUBLISHED WEEKLY.

JULY 7TH, 1908. TUESDAY. No. 1,026. VOL. XXVI.



THE LAST LINE.

BY A. J. HOLMES.

Awarded the Silver Plaque in the April Advanced Workers' Competition.



EDITORIAL

The Special Summer Issue.

Holiday photography forms the subject of by far the greater portion of this issue, and we hope that few indeed will be the readers of *Photography and Focus* to whom such a topic at the present moment will not prove seasonable. The summer holiday with many of us is the time when we make the negatives upon which we rely for occupation at other seasons—printing, slide-making, and enlarging. Upon the photography that is then done depends the success or failure of the year's output, for no fact is more indisputable, in spite of all that has been written about making the best of a bad job, than this, that a good print, or slide, or enlargement, can only be made if the original negative is good; the moral of all which is, of course, that no pains should be spared to make good negatives.

There is one question we often have to put to amateurs who apply to us for advice, and that is whether or not they use an exposure meter. We are not advocates of any one make over any other, and certainly have no interest in the exposure meter trade; but we say deliberately that no photographer who wants to make good photographs with a minimum of failures can afford to do without a meter. If he is the user of a camera with a shutter of one fixed speed that cannot be altered, then the meter will at least serve to show him what subjects he can and what he cannot take with it, and so save a great deal of waste. If he can time his shutter—still more if he is a stand camera user—the meter should enable a good negative to be obtained practically on every plate exposed. Those who want to learn photography, and to learn it quickly, therefore, we would advise to get a meter, and learn how to use it. The use is simple—surprisingly simple when the extent of the gain the little tool confers is taken into consideration.

Seaside Pictures.

Of all the thousands of plates which will be exposed on breaking waves, the ripples on the beach and sea, and sky effects generally in the course of the next two or three months, how many of them, we wonder, will give prints that repay the trouble of taking. Only a very small proportion of such exposures ever seem to reach the print stage, and still fewer may be regarded as successful pictures. Why is this, we wonder? Perhaps it is due to the absence in the

photograph of any charm due to the colour, so that, however attractive the view may be in reality, its photograph becomes commonplace and dull. More still must be attributed to the dwarfing of everything in the little print. Every amateur has learnt the lesson that wide open expanses of landscape make poor photographs, from this cause; but the same fact is apt to be overlooked when the open expanse is one of sea. Yet almost every sea picture is of this panoramic character, and the print shows everything dwarfed and insignificant. Nothing will bear stronger evidence to this fact than breaking wave studies. Waves that

seem grand to the eye are diminished to unimportance in the print. Something can be done to remedy this—by holding the camera as low as possible, remembering that the lower the standpoint the larger will the waves appear—but few are the wave pictures that are not disappointing from this cause.

We may remind our readers who are new at photography that sea and sky pictures, unless there are figures or boats with heavy shadows in the near foreground, require

much less exposure than subjects of the ordinary landscape type—about one-eighth as long, usually.

Air in Water.

While tap water in different parts of the kingdom differs very considerably in the quality and quantity of the impurities present in it, there is one which is not generally shown in analyses, yet photographically is as important as any. Needless to say, we refer to the air dissolved in it. This has a very marked effect on the keeping properties of developers made up with it; the more highly aerated the water the sooner will the pyro solution made with it become useless. To remedy this we are often advised to boil the water briskly and let it get cold without agitation. This gets rid of much of the dissolved air, and should always be done when the water is required in comparatively small quantity for a stock solution of developer. Some water is so full of air as to be quite white and opalescent when first drawn from the tap, although in half a minute or so it clears as the air bells rise to the surface. Such water is likely to trouble the carbon printer, and is a fruitful source of those minute bubbles which manifest their presence in the finished prints as glossy specks on the otherwise matt surface.



MEMORANDA for the week

To send a postcard to J. Lizars, 101 and 107, Buchanan Street, Glasgow, for a fully illustrated catalogue, that is in addition a reference book on all the ordinary photographic processes.

Home Portraiture.

Some of the difficulties which confront the amateur who is trying to make portraits of his friends are avoidable, and one of these is the presence of a great deal of white clothing. Children especially often figure almost entirely in white, and as a result, particularly if the exposure is at all on the short side, their complexions come out many shades darker than white pinafores and frocks. Ladies are not often offenders in this way, as there is a prevailing impression that white is not a good colour in which to be photographed. When it can be properly dealt with the treatment of a white dress may often form a most attractive part of a successful photograph, but it requires skill, and the beginner, for that reason, should steer clear of such gratuitous difficulties. The white muslin used for draperies can be greatly improved for such a purpose by lightly tinting it with some yellow dye; it has even been suggested that it should be stained with tea or with coffee.

Photography at the Franco-British Exhibition.

We have been endeavouring to get the restrictions upon photography at the Franco-British Exhibition removed as far as amateur photographers are concerned, deeming that such a course was more in the interests of the great body of our readers than it would have been to publish glowing accounts of what might be done there were photography to be possible. The exhibition authorities were courtesy itself, but concessions that had been granted, and other matters, stood in the way. We are now able to announce that in the immediate future it will be possible to purchase at the gates permits to photograph, the price of such daily tickets being fixed at one shilling.

Fancy Development Methods.

The aim of the photographer being to make with every exposure as good negatives as he possibly can, any fancy or abnormal method of development is to be deprecated. The proper way to develop a plate, to make the best of it, is to place it in a non-fogging unrestrained developer for the proper time, then to take it out, rinse it, and fix it. The actual developing agent that is used is, from this point of view, quite unimportant. Pyro, metol, hydrokinone, amidol, glycin, rodinal, dianol, all have their advocates; and nothing in photography is more certain than that the negatives that are obtained with each of these when it is properly employed, cannot be distinguished from those obtained with any other. An Austrian photographer has recently been advocating the use of two separate solutions for development—a method which had its supporters more than twenty years ago. He suggests standing the plates in a grooved rack in a metol-hydrokinone solution, without alkali, for half a minute, and then transferring them to a bath of carbonate and sulphite for half a minute. They are then finished. It is difficult to see that the method has any advantage over development as ordinarily performed, while it certainly has very obvious disadvantages, which would tell on the quality of the negatives.

The Title Competition.

The entries for the competition which closed last week are very numerous, and the judging of the competition is not finished at the moment of going to press with this issue. The result, however, will be published, without fail, in the next issue. In the meantime, we would draw the attention of our readers to the Advertisement Competition, full particulars of which are to be found on page liii.



MONDAY, JULY 6TH.

Photographic Convention opens Brussels.
Walthamstow P.S. "Architecture." J. Cox.

TUESDAY, JULY 7TH.

Nelson C.C. Local Treasurers in Developing. A. Ingham.
Batley & D.P.S. Statforth.

WEDNESDAY, JULY 8TH.

Lincoln A.P.S. "Fillingham Castle."
Windsor P.S. Marshfield.
Boro. Poly P.S. Farm Competition.
Maidstone & Institute C.C. Rochester.
Stockport P.S. Print Competition.
Lincoln A.P.S. Fillingham Castle.
Balham C.C. Members' Night.

SATURDAY, JULY 11TH.

Batley & D.P.S. Pateley Bridge.
South Suburban P.S. Old Oxford.
Central Y.M.C.A. Anglo-French Exhibition at Shepherd's Bush.

Societies will have their meetings announced here if the syllabus is sent to us at the beginning of the Session, or from time to time



The Week's Meetings

SATURDAY, JULY 11TH (continued).

Wallasey A.P.S. Eastham Woods.
Attercliffe P.S. Scafe Wood.
Paisley Philosophical Institution. Paisley.
Bristol P.C. Keynsham to Pensford.
Blackpool & Fylde P.S. Churchtown.
Edinburgh P.S. Prestonspears.
Boro. Poly P.S. Hadley Woods.
Blackburn & D.C.C. St. Michael's Fylde.
Preston C.C. Labau Yates.
Chelsea & D.P.S. Windsor.
Photo Art Club (Aberdeen). Loch of Park.
Northamptonshire Natural History and Field Club. Turvey.
Walthamstow P.S. Theydon to Ambresbury Banks.
Barrow-in-Furness Naturalists' Field Club. Swarthmoor and Gascoyne Quarries.
Watford P.S. Moor Park.
Manchester A.P.S. Grindleford.

MONDAY, JULY 13TH.

Bedford C.C. "Open Questions on Holiday Photography."
Wallasey A.P.S. "The Carbon Process." R. A. Spy.
Southampton C.C. "Demonstration of Ozobrome." H. W. Miles



By Anthony Green. Special to "Photography and Focus."

WHAT is the precise charm which hangs about the word "Continent" to the holiday-making Briton is not easily defined; but whatever it is there is no doubt about its power to draw him abroad. The Continent may mean anything from the midnight sun of the North of Norway to the palms and oranges of the

Mediterranean coast; but its attractive power is unquestionable. Moreover, it does not decrease, but increases with successive visits. There is no need, therefore, for me to write these notes for those who have been before; that would indeed be preaching to the converted. But let me urge those who have not yet tried it to make the plunge this year, if only a small one, and to get across the silver streak that separates John Bull from his neighbours.

Many a Briton holds the perfectly reasonable view that England is good enough for him. I do not dispute the fact, and am willing to assume that he is the best judge of his own deserts. But it is not on the ground that the Continent is any "better" than our own country that I base my plea, but rather that it is different. An hour or two on the water and we are in a land where the language, the appearance, the habits, the food, and the very air seem changed. Everything on that first visit will seem fresh, and to one who is content to pocket his prejudices delightful.

Let us suppose that Normandy is the chosen spot. We land at Dieppe, or perhaps at Havre, or at the still more fascinating and old-world St. Malo. The Customs examination at the hands of a quick, dapper, and polite little Frenchman is the slightest of formalities, and we are free to wander through the town. Do not forget to bring the hand camera on that first walk. Here come a couple of French soldiers. Little fellows they are, and, truth to confess, distinctly slovenly beside the stiff, well set-up Tommy Atkins. And look at their trousers. Tight round the ankles, they are enormous above; a couple of bodies, not legs only, could

be put into each of these formidable bags. Snap them while you can. Your untravelled friends will be amused, and to-morrow French soldiers will be such a matter of course that you will never think of wasting a plate on them. A little further on we are in the market, and here we can take our pick of the old ladies in their neat white caps presiding over piles of the most attractively displayed vegetables.

Question for the enquiring mind—Why is it only the old market woman who looks worth a plate? The younger women in the markets look tired; worn out, perhaps, with the chaffering which seems to go to the sale of a single onion.



At Chioggia (see page 177).



In Tunis.

Belgium is even more likely to attract than France. For one thing, Belgium has the name for being very cheap—a name which it

well deserves, although Normandy in this respect takes a lot of beating. The Englishman pervades Belgium. The very last meal I had in a restaurant at Bruges, the waiter told me that English was being spoken at every table without exception. Antwerp is the best starting point for a Belgian trip, and the camera will be wanted long before we draw up to the quayside, for the approach to Antwerp by river in the haze of a summer morning is a thing to be remembered.

The lover of architecture, of quaint old towns with lofty belfries and tinkling chimes, has a round of delights within easy reach of Antwerp. He can visit Malines, Louvain, Brussels, Ghent, Ypres, and Bruges, at a cost of not much more than a franc for each journey from one town to the next.

At each of these he will find clean and unpretending hotel accommodation at prices which seem absurd to English eyes; and at each there is ample work for the camera. If he wants

for the benefit of those who have not been before. Having settled which is to be "the most favoured nation," let the holiday-maker change most of his money, if possible before he starts, and let him be sure that he understands the coinage. It is very little trouble to master, and repays itself directly. Let him take plenty of small change, from the very outset. Let him avoid hotels and other places which put up "English spoken here." As a rule, it isn't; and, although there is no great chance of anyone taking advantage of the traveller's unfamiliarity, those are the places where, if anywhere, it may be encountered. Indulge in no eccentricity of dress; wear what you would wear in England. Be polite, even if you cannot be polite in a



Figure work with the hand-camera (see page 177).

landscape only—and for pure landscape England, I admit, is very hard to beat—let him push on to Namur from Brussels, and thence take the steamer or the train up the Meuse to Dinant and the Ardennes.

Holland, like Belgium, is the land of quaint old towns, but Holland is still more remarkable for quaint old figures, and quaint young ones, too. Landscape, as we understand the word, there is not much of, but the hand camera will be in constant requisition. Flushing or Rotterdam will be the starting points, presumably; but Amsterdam is the best centre for a Dutch holiday. The cost of living in Holland is higher than it is in Belgium, but is still decidedly less than at any English watering place.

Now for just a few words on a foreign holiday generally.

foreign tongue. If you visit the towns, buy some guide which contains maps of them, and carry it with you. It will save a lot of enquiry and a lot of trouble in trying to understand directions.

To photographers specially I would add, take plenty of plates of the sort to which you are accustomed. Take a good big opaque cloth and a few drawing pins, and make your own dark room as required. Learn to change plates in the dark, and eschew foreign dark rooms. Do not photograph anywhere where a sentry is to be seen; and do not bother about permissions to photograph. Unless the prints are wanted for some specific and important purpose, it is not worth the time of a tourist to apply for permits for the comparatively few things for which they are a necessity. It will be found

that they are very rarely required; and that, in fact, the restrictions on photography abroad are, generally speaking, much fewer than they are in this country.

Finally, you who are hesitating on the brink of a trip, take your courage in both hands, not minding your ignorance of foreign tongues, and plunge in. Nothing dreadful will come of it—nothing more dreadful, in fact, than a determination when you get back to repeat the delightful experiences at the very first opportunity.

THE ADVERTISEMENT COMPETITION this week, details of which will be found amongst the advertisements, enables each reader to express his opinion as to the effectiveness of our advertisers' designs. No entrance fees required

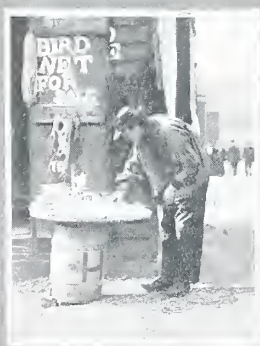
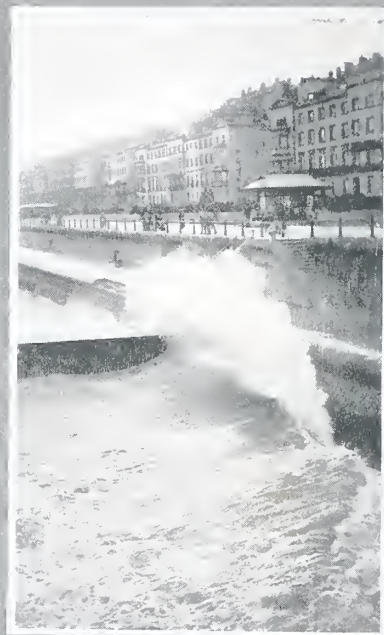


Figure Work with a Hand Camera.

WITH ILLUSTRATIONS.

BY THE EDITOR.



WORKING largely with a hand camera, figure subjects have always appealed to me very strongly; and the wonderful power which the hand camera user possesses, of getting absolutely natural poses free from all trace of camera-consciousness, is one which I have been very fond of exercising. A few of my results are reproduced herewith: and will serve as texts on which to hang a few remarks about this particular side of photography.

There are those who contend that for work of this description a reflex camera is the most suitable; and certainly I have seen some remarkably good work done with one. But whenever I have attempted to use apparatus of this type, I have always found that the conspicuous character of the camera and of the photographer's attitude, and the somewhat lengthy nature of the operation of focussing and exposing, are decidedly against it. Take, for example, the Tunis pictures on this and the following page. They would not have been possible at all with a reflex camera, for the simple reason that the subjects would have noticed what was going on, inevitably, and those of them who were Mohammedans would have covered their heads in a moment. In some Eastern places, instead of hiding their faces, they adopt the equally simple plan of stoning the photographer.

Many workers may never have the good fortune to photograph in an Eastern city, where almost every figure is picturesque, but in any market or on any beach there will be opportunities of getting effective figure studies. The great thing is to be ready for them the moment they arise. To this end there must be no focussing at the time. My own plan is to carry the camera focussed for twelve feet, the lens at its full aperture, and the shutter set to suit that aperture and the light, say $f/7$ and $\frac{1}{125}$ s. in a very good summer light. The camera is carried like a bag or parcel, not looking on the finder at all, but looking about for possible subjects. When one is found that promises well, a glance will show the best direction in which to take it, and then, as



The Crockery Shop, Tunis

unobtrusively as possible, I take a position twelve feet away from my subject, perhaps facing the other way, certainly doing nothing to indicate that any photography is contemplated. At the right moment the camera is raised, the finder glanced at, and the exposure made in an instant.

It is a bad plan to look at the figures after exposure, or to do anything to show them that they have been photographed. If it is a good group, it may be still better in a moment if its members are still unconscious of the camera, and it is a pity to destroy the chances of a second exposure. The two gentlemen, the Arab and the Jew, on this page were sufficiently absorbed in their discussion to allow me to get three different exposures without suspecting the presence of a photographer.

The finder should only be used to get a good idea of the aim of the camera. The unaided eyes of the photographer should do the work of selecting the subject and the best view point. The greatest difficulty is to realise what the background of the figures will look like in the photograph. It always looks better to the eye at the time, because for one thing the eye focusses on the figures themselves, and only sees their surroundings as a general impression; for another that differences of colour which are lost in a photograph help to make the figures stand out; and for a third there is always to the eye a sense of atmosphere, the background always looks separated from the figures by some depth of air, while in the print some of this is invariably lost. Therefore one must either be particularly careful to get a background against which the figures stand out strongly and well, to allow for loss of this when photographing, or else must rely on faking or dodging in the print.

Under-exposure in work of this sort is quite fatal to success; and the temptation is always to under-expose. Hence we so often see groups with unnaturally dark faces. As a rule, it is well to get a dark background for a face, the sky is about the worst that can be selected; but even with the sky the faces will be fairly right in tone if only the exposure has been sufficient.

It has been said that work of this sort is an abuse of the hand camera, and is ethically indefensible; but such a charge hardly deserves reply. A gentleman, using the word in the best sense, will find that there is a great deal of interesting work to be done on these



Bargaining.

lines without in the least overstepping the bounds of good taste; and I will not so far depreciate the readers of *Photography and Focus* as to assume that they would go beyond those limits.

It is best to be provided with the fastest plates available for work of this kind, and, personally, I never use them unbacked. There is no marked advantage to be got by using orthochromatic plates for the purpose; but those who prefer them to non-orthochromatic ones on general grounds will no doubt do well to use them for figure subjects.



The Camera and the Custom House.

BY W. W. OFFOR. Special to "Photography and Focus."



WHEN the camera was only occasionally the companion of the traveller, the appearance of sealed packets in one's baggage—packets which the tourist manifested a strong disinclination to open—was sufficient to arouse suspicion in the mind of the Custom House officials. Those who have had no experience of passing a frontier, and of the baggage examination which is supposed to take place thereat, may perhaps imagine that something of

the same kind still lingers in the mind of those who have to make the search. It is to reassure the would-be foreign traveller that this note is written.

Now that almost everyone travels and almost every traveller carries a camera and a supply of films or plates, the Custom House officers both in England and on the Continent are as familiar with plate boxes as any amateur photographer could be. I suppose that at some time or another they have insisted upon a box of plates being opened; it is only reason-

able to assume that such a thing has taken place. But it is only supposition on my part. I have been through many Customs examinations, conducted not only by Britons, but by French, Germans, Italians, Turks, Norwegians, Americans, but never once have I been asked to open a box of plates; nor have I ever heard, at least not within the last fifteen years, of any other travelling photographer being asked to do so.

The presence of the camera amongst one's luggage is generally quite sufficient explanation of the plate boxes. The official, if he does not understand the photographer's tongue, and *vice versa*, does not want to waste time in hearing him deliver an unintelligible and laboured oration on the fact that plates are necessary for use with a camera. He knows that; and he also knows, as he has been told perhaps half a million times in his life, that plates are spoiled by being exposed to the light. All the Customs official wishes to do is to get you off his hands as soon as he can, and resume his resting.

Where many inexperienced travellers make a mistake is in the assumption that the Customs examination is what is depended on to prevent the introduction of contraband. Generally speaking, it is little more than a formality. A check on smuggling, no doubt, but not the greatest, much less the only, check. The fact is that other things are very largely relied upon. Plain clothes officers—in other words, spies—observe travellers long before they approach the examination bench. The gold-laced official knows, partly from intuition, partly from private information, who it is that is to be examined closely; and those are the only people he takes an interest in. John Smith, of Walthamstow, even

if he has stowed the contents of an entire box of halfpenny German cigars in his various pockets, is John Smith all over, and, however much he may fancy himself, His Majesty's Customs decline to look upon him as a smuggler chief, and pass his Gladstone bag and stuffed pockets with a slightly contemptuous ease.

It is certainly a very foolish thing to try and bring dutiable articles through the Customs surreptitiously, as the saving that is effected by so doing is very trifling, and is swallowed up over and over again by the expense which detection entails. If this is foolish on returning to England, it is ten times as foolish when the Customs that are to be evaded are foreign ones, for the trouble and the delay may be very serious indeed.

The traveller who has a clean conscience when he presents himself for examination, on the other hand, has nothing whatever to fear from it. He will find that it is over almost before it is begun. Frequently he is asked to open nothing whatever; and if he is not entirely passed over in this way the examination is not a formidable one.

Let me add a few hints in conclusion. Tobacco or spirits are best carried in one's pockets, and produced on demand. It is well to have boxes unlocked in readiness for examination. Undue anxiety to be examined is quite as out of place as undue anxiety to avoid the operation. Civility is never thrown away; the examiner is only practising a not very agreeable profession to get a living—he is not a personal foe whose opportunity has at last arrived. In most civilised countries any attempt at bribery will lead to trouble; in out-of-the-way communities corruption is no doubt rampant, but the tourist in such lands would hardly look to an elementary article such as this for advice.

Success with Self-toning Papers.

Hints on Printing, Washing and Fixing.

USERS of self-toning papers are in a very great majority to-day, and we have no doubt that the following wrinkles, which were given recently in a lecture and demonstration by Mr. L. M. G. Cuthbertson, F.G.S., which was delivered at Messrs. Leadbeater and Peters's establishment at Rotherham, will be appreciated. Mr. Cuthbertson was demonstrating Seltone, the excellent self-toning collodion paper made by the Leto Co., and his remarks must be taken, primarily, as applying to that paper, but to a less extent they are applicable to all self-toning papers.

Printing on Self-toning Paper.

The printing is carried out as it is in the ordinary way for P.O.P., but the prints when they leave the frames should look much darker than the finished print is to be. A common error in printing is not taking it far enough. This invariably gives a weak-looking print. Moreover, the larger the quantity of metal forming the image, the greater the permanence, and a large deposit can only be got by printing sufficiently deep. Needless to add, neither the printing nor the examining of the print should be done in direct sunlight, and the less the print is handled before it goes into the fixing bath the better.

The Preliminary Washing.

There are many users of self-toning papers who put their prints direct from the printing frame into the fixing bath. This is quite right if permanence is of no consideration; but if it is desirable, then this mode of procedure is fatal. All papers contain an acid preservative, and the effect of putting an unwashed print straight into the fixing bath is that part of the hypo gets decomposed, sulphur compounds are evolved, and the fading or deterioration of the print is simply a question of time. But if the print is given a preliminary washing in two or three changes of clean water, this risk is

obviated, as the whole of the acid preservative and free soluble silver salts present are washed out.

The Fixing Bath.

It seems to me remarkable that so many workers are content to go on using hypo year after year, gallon after gallon, without ever worrying to know anything of its elementary properties. A little knowledge of its simple properties and functions would be of great value and interest, in helping to turn out the best possible prints. The simple facts that when hypo is dissolved there is a big drop in temperature, and that hypo solution is considerably heavier than plain water, explain why certain precautions are recommended. The strength of the hypo to be employed varies with different makes. With a collodion paper like Seltone a ten per cent. solution (two ounces of hypo to the pint of water) is an excellent strength. The prints should be kept in for at least ten minutes. Fresh clean hypo should be used, and plenty of it; but those of an economical frame of mind will be interested to know that one ounce of hypo will properly fix twelve quarter-plate prints. The secret of success is that the prints must be kept on the move. To put a number of prints into a hypo bath and just leave them for ten minutes is useless. They only pack close together at the bottom of the dish, and uneven toning and fixing result. If a number of prints are being done at the same time, the best way is to have two dishes of hypo and to keep passing the prints from one dish to another. If only one dish of hypo is available, then one should keep pulling out the bottom print and placing on the top.

The Final Washing.

There are many ways of effecting the final washing, which, needless to say, must be thorough. Without doubt the quickest and most satisfactory method is by hand washing; ten changes of water, lasting over an hour, if properly done,

will be sufficient, but here again the golden rule is to keep the prints on the move. Turning a print over and over in a dish of water for five minutes will remove more hypo from the print than allowing it merely to soak without agitation for half an hour. In the latter case the hypo solution diffuses out, and being, as already mentioned, heavier than plain water, just lies on the top of the print, preventing further hypo solution from diffusing out. A short washing with frequent changes therefore does far more good than a long washing with running water. It takes less time and less water, and avoids too long a soaking, which tends to deteriorate the image.

CORRESPONDENCE



The Editor is not responsible for the opinions of his correspondents.

PLATE SPEEDS.

Sir,—The writer on this subject in your issue of June 23rd has unfortunately forgotten, or does not know, the change made by Watkins in 1902 in the rapidity of his actinometer paper. It was then altered so as to take the tint in eight seconds where it formerly took only five seconds. This necessitated a corresponding change in the value of P in order to obtain the same actual exposures as before. This change altered the relation between his actinometer and that of Wynne.

Before this change the relation was $F^2=64P$, now it is $F^2=40P$. The figures copied from Mr. Sterry are, therefore, obsolete, having been obtained from the formula $F^2=64P$.

With regard to Column 1. These numbers are not H.D. but the values of P under the old formula. The figures in column 2 are of no use. With regard to H. and D. numbers, it is useless to discuss them unless one can depend on their having been properly obtained.

Messrs. Wratten and Co., of Croydon, who have on their staff one eminently qualified in these matters, give the following as the relation between P and H.D.: To obtain P from H.D. multiply H.D. by 25 and divide the result by 17. We have, therefore, the following relations:

$$P = \frac{F^2}{40} = \frac{25}{17} \times H.D.$$

or to take a particular instance—

$$F = 100 \quad P = 250 \quad H.D. = 170.$$

Yours, etc.,

CLIFFORD E. F. NASH. M.A.

TONING DIFFICULTIES.

Sir,—As a photographic dealer I am constantly being approached by beginners who are in difficulties with their hobby. Most beginners "bungle" toning. Even the most careful and painstaking break down at toning. Why? Is it more difficult than any other photographic process? No, not a bit more difficult. Method—more method required, that's all.

Makers of P.O.P., instead of merely giving formulæ for toning, might also state (apart from any other instructions given) that the only successful method of toning is to calculate the amount of gold required for the number of prints on hand, and to tone that number all at once. Most beginners make, say, a pint of toner and keep putting in prints one by one till no more will tone. As a result they tone only about half a dozen quarter-plate prints, whereas they might have toned a 1s. packet or more of paper. Two grains of gold chloride to a 1s. packet of P.O.P. (as mentioned in a recent number of *Photography*) is a liberal allowance for purple tones, using ten grains of sulphocyanide to every grain of gold chloride.

Then the question of how much water to use might be made clear. The safest plan I find to recommend is to use enough water to cover the number of prints being toned, and to allow toning to proceed at a convenient pace. To save

Causes of Failure.

The two causes of failure which account for nearly all the ills that befall self-toning papers are: (1) Incomplete or inefficient fixation; and (2) not a full elimination of hypo from the print. The remedy for the former is to keep the prints on the move in the manner described for the full allotted time, and for the latter frequent and many changes of water, allowing the prints no repose till their enemy—the hypo—has all been ignominiously expelled. If these two main considerations are always borne in mind and carried out, I will guarantee perfect freedom from the troubles that sometimes beset the users of self-toning papers.

trouble of calculation, makers of P.O.P. might give a table or scale showing the quantities of gold chloride and sulphocyanide to be used for any number of prints of various sizes right down to two or three C. de V.'s, also quantities for various tones.

Even this will not be a complete success. Amateur photographers seem to have a fearful dread of reading instructions given by makers of plates and papers. It will be necessary to print in large block type outside the envelope and on the paper of directions, "*Read the directions carefully.*"

Makers of P.O.P. please make a note of these few remarks from a dealer, and if of any value put them into practice.

Yours, etc

C. KEMSEY-BOURNE.

HYPO-ALUM TONING OF P.O.P.

Sir,—On seeing the notes on the Hypo-alum Toning Bath for P.O.P. in *Photography and Focus*, I set to work to test it, and have found very little resemblance between it and an ordinary gold bath.

The bath I use has the formula, hypo 3 ounces, alum $\frac{1}{2}$ ounce, water 1 pint. This contains a large excess of hypo, and can therefore be used as a combined toning and fixing bath. Printing is carried to about the same or to slightly less depth than usual, and the print is placed in the bath either with or without previous washing. It immediately turns orange-brown, similar to the colour of prints merely fixed without toning. The tone then gradually changes to an excellent brown, apparently permanent, but which I have not had sufficient time to test.

As the colour cools it becomes a purple, which is not altogether satisfactory, then black, and then slowly fades to a yellowish colour. If left in much longer it turns to white paper.

There appears to be a quantity of alum unacted upon in the bath, as it also has a hardening effect, so that prints toned in this bath can be glazed without further treatment.

Thus its advantages over gold toning seem to be that—

(1) There is no change in tone after removal from the toning bath.

(2) A bath containing only two ingredients and costing practically nothing serves the threefold purpose of fixing, toning, and hardening.

(3) It is extremely simple in use.

(4) Toning is perfectly even.

Its disadvantages are:

(1) Only one tone is really good, which is the brown. The purple-brown is also good, but beyond that the tones are poor.

(2) It is slow in action, although not excessively so, the brown being obtained in about ten minutes. However, this is more than compensated by the fact that only one bath is needed.

I am enclosing a series of prints on Wellington P.O.P. and also postcards, toned in this bath.

Yours, etc.,

H. JEFFREYS.



"Critics I—appalled I venture on the name,
Those cut-throat bandits in the path of fame."—BURNS.

THERE is nothing so trickily difficult, in art, as to be absolutely natural; or, I should say, as to convey the impression of absolute naturalness. Nevertheless, naturalistic subjects have a strong appeal to the camera owner. They seem plainly his department, so to speak. Photography is a simple straightforward art (or "craft," if you prefer), and therefore simple straightforward subjects should be easy to render by its aid. Here, for example, is a picture called "Trimming the Grave." It is an honest subject, and it has an honest title. If one may venture the irreverence this work may be said to have "no frills" about it. It is a naturalistic picture, if there ever was one; and by naturalistic I mean that it is an endeavour to get naturalism. Now an endeavour to get naturalism often takes a composite form—it is a combination of genre, portraiture, and incident. Here we have all three. The old man no doubt looked on the photograph as a portrait of himself; the photographer classed his conception—if he thought about it at all—as a genre one, and we who see the reproduction of the print are inclined to consider it as a snapshot of an incident, perhaps caught sight of when bicycling past the churchyard.

And as all three—genre, portraiture, and incident—it will in a sense pass muster. It is a good piece of photographic technique, and a remarkable specimen of naturalism. But it is a specimen of the weakness of naturalism, not of its strength. It is a specimen of the peculiar weakness of photographic naturalism, indeed; that naturalism which is so natural that it verges on the unnatural (to be, for the moment, a shade paradoxical). Nothing is left to our imagination. The lens insists on showing us far more than we saw when we cycled past the churchyard wall and glanced over it and "spotted" our subject. The camera "spotted" far more than the photographer did. In short, it spotted the spots!

Do not run away with the idea, please, that I am trying to be facetious at the expense of this print. It embodies a serious lesson for us all. It not merely tells the truth, but it embroiders it with a lot of additional information which distracts our attention from the central statement, and positively begins to make it a little untrue. The old sexton, and the sombre nature of his task, ought to be the beginning and the end of this picture's statement. At first glance the distance, made up of



A Little Help.

crosses and of cemetery foliage, seems to help the story, emphasise it, accompany it. Instead, they detract from it. Try to keep your eye on the old man's face. You can't do it. The crosses entice it away; and as soon as your eye has been tempted to rest on one of them, the other starts to compete with it, and then the highlight at the left competes with the second cross, and then the bulk of white on the right competes with the highlight, and then the old man's shirt sleeves compete with the bulk of white; and only after a long and wearisome journey round the picture does your eye come back to the old man's face—to hesitate there a moment and immediately be off again chasing the competitive patches of interest elsewhere.

Compare this with "Shelling Peas," which is just as naturalistic and in just as everyday surroundings; and see how firmly the second picture holds together compared with the first. "Shelling Peas" has defects; but they are the defects of its qualities. It is commonplace—but shelling peas is a commonplace performance. There isn't much sentiment about shelling peas, and there is a good deal of sentiment about the



Trimming the Grave.

By F. A. Aldridge.

sexton's task; but "Shelling Peas," as depicted here, has more sentiment in a square inch of it—the square inch including those beautiful toil-worn hands—than "Trimming the Grave" has in its entire area.

A similarly naturalistic domestic scene is "A Little Help," which, however, has not the dignity of "Shelling Peas," and betrays, too, self-consciousness. It is well within its frame, though, and that is a merit. "Shelling Peas" has the same merit—which is noticeably absent in "Trimming the Grave." This latter suffers from the old, old fault of highlights at the extreme edges, so that the subject looks as though it were trying to escape from its boundary. You will rarely find a strong picture which has a highlight at the margin, and isn't the weaker for it.

Yet this accentuation of the subject by keeping its highlights well away from the edges can be overdone. "A Picture for Mother," excellent though it is, errs in the way of subduing the background. It has been subdued so radically that we notice its subdual. The little lad's pose is almost perfect, and in the original the texture of the skin of his face is really captivating; but so extreme is the blackness of the room behind him that it arouses the misgiving that it is an actual piece of drapery—a studio background, in fact. This doubt, once having entered the mind, ruins the impression of naturalism which the photographer presumably intended to convey. This hint, this faint tinge, of artificiality in the picture is its sole flaw. It is only another instance of how the least suspicion of the presence of art, in a work which aims at naturalism, kills it. Which brings me back to what I said at the outset, that there is nothing so tricky difficult, in art, as to be absolutely natural.

I conclude with a picture which is absolutely natural, in my opinion. It is called "The Bargee," and it is precisely what its title says it is. Well, what's wrong with it? It is true to life. It is passable technically.

The obvious criticism is this: Naturalism isn't necessarily beautiful. Bargees may handle tillers, the barges may go under bridges—the situation, in fact, may exist and yet not be worth registration. This is, I grant, "a thing seen." But to see it was quite enough. It did not need recording. This, candidly, is a needless picture, as it stands. In different circumstances, with a different lighting, a different background, a different barge, and mayhap with a different and less banal bargee, this theme might make a fine picture. As it is, the picture is commonplace not only in theme, but in rendering. "Shelling Peas" is commonplace in theme but not in rendering. The recording of it has made it beautiful, or at any rate evoked the beauty latent in it. But "The Bargee" is so literal that we feel we are being told something we knew already. There is nothing more boring than that.

To be true, yet to say something more than bare truth: to say that "something more" without becoming garrulous and saying too much: to be



Shelling Peas.

By W. H. Thompson.

simple without being silly—these are the secrets of artistic naturalistic photography. These are also its pitfalls. No branch of pictorialism is fuller of them.



The Bargee.

By M. E. Sutton.



A Picture for Mother.

By F. W. W.



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LADIES AND PHOTOGRAPHY.

By a Mere Man.

Certain mistakes which the feminine photographer is prone to make : and their remedy.



PHOTOGRAPHY for ladies is, of course, precisely the same as photography for men; let me admit this, frankly, at the outset. Then why write an article on photography for ladies? Why not call it photography for all? Simply because there are certain mistakes which, in my experience, I have found to be made by ladies far more often than by men. Men make plenty of mistakes, I grant you. (There are so many mistakes to be made by the camera tyro!) But the sort of mistake a man makes is different, I consider, from the sort of mistake a lady makes; and as most articles and textbooks on amateur photography are written for men by men,

handled all sorts of "machinery," from safety razors to motor bicycles, more or less all his life.

A man knows by experience that a finely-adjusted piece of cabinet-work like a camera is made to work smoothly, and that no force whatever is required either to open or to close it, or to manipulate it when in use. Place a quite novel camera in his hand, closed, and tell him to open it. If he does not at once see how to open it, he will gently try pressing a spring here, turning a screw there, but he will rarely pull or push any of the parts with any force. He *knows* that the minute he gets the right knack the camera will spring or glide open perfectly smoothly and unjarringly, and that as long as it declines to do so it is being wrongly manipulated.

A lady photographer does not seem to reason thus. She seems to think that the camera may be working "stiffly," and needs force to open it—and she uses force. I have seen a lady photographer wrench a camera open with such force as actually to break the tiny metal catch which was innocently holding its lid shut, and which merely needed a touch to displace properly. She did not reason logically, as I venture to assert that a man would have done, that there must be a catch concealed somewhere, and that a patient, gentle search would find that catch. "Trust the camera maker": that is the moral. You may be sure that he did not charge you several guineas for



A HEAVY LOAD.

Awarded a Prize in the "Focus" Landscape Competition.

BY THOMAS CHESTER.

difficulties and troubles which are encountered more particularly by those of the fair sex who photograph are apt to be neglected. Hence these notes.

Let us start with the manipulation of the camera itself; and at once I find myself recalling certain sad occurrences which have marked the career of some of my feminine pupils, but which have never happened with the masculine ones. It may sound rude to say so, but a girl who is handling a camera which is new to her is far more likely to break it, or, at any rate, to do it some damage, than her brother is. It is not that the girl is stupid or essentially clumsy or rough with the instrument. It is purely that she has a different mental attitude towards the camera—in other words, that she is more unaccustomed to "machinery"—than a man, who has

an instrument which needs the exertion of no small quantity of muscular strength to open and close.

Not long ago a lady brought to me a folding camera of the "hand-or-stand" variety, which was fitted with dark slides for plates, and complained that the slides did not run into their grooves in the camera back easily. She had had to force the slide in so hard that she had chipped a piece off the ridge of the groove. Now, I am ready to admit that poorly-made wooden slides sometimes might swell a trifle and be hard to push into their grooves; but such swelling is really extraordinarily rare, thanks to the excellent wood which is used for this type of fine cabinet-work, and, moreover, however bad the swelling, the slide would have entered the groove without having chipped off the ridge. Further,

the lady asserted that, thanks to the bad fitting of the slide, there was light leakage at the margins of the plate, and she had spoilt some negatives by fogging. Well, if there is one part of the camera which is carefully made to avoid fog, it is the entrance for the dark slides; so again I was suspicious. I examined the camera, and found the mistake at once—the lady's mistake, not the camera maker's. The instrument had the usual reversing back, so that upright pictures could be taken as well as horizontal ones; and after taking a vertical picture the owner of the camera had replaced the back in the horizontal position, but *upside down*. The consequence was that she was all the time trying to force the slide into its groove from the wrong end—from the end of the groove where it was never meant to enter, and where, in fact, there was a stop specially put to prevent it entering. By using force, she had broken this fragile stop, to some extent, but naturally the slide did not fit smoothly (to put it mildly), and, not fitting closely, let in the light.

How was she to know that she had put the reversing back upside down? She ought to have known, because, as I proved by a trial, it needed the utmost force and a lot of fumbling to get the back to fit into the camera upside down. A man might have tried to put it into the camera upside down, but he would have stopped trying the minute he saw that the job needed force. Instinct and training would have told him that the maker of the camera never could have meant such force to be used; and he would have tried some other way of putting in the back, until he found the right (and simple and easy) way. There is no fumbling needed to work a modern camera, and if you have to fumble then you are working it wrongly, and you will pay the penalty. This particular lady had to pay several shillings to have the damage to the reversing back repaired.

To reload a Kodak or similar camera with a spool of film is easy, and once the lady owner of a Kodak has been shown how to do it she does it far better than the average man, and far more quickly. The fingers trained to such exquisitely delicate tasks as, for example, knitting and crochet, can manipulate small objects with a neatness which comes only with practice to a man. But I have seen roll films badly loaded by lady beginners, all the same, especially when using some of the older types of film cameras, which are less easy to load than the latest patterns.

It is immensely important that the black paper wrapping of the film should be threaded into its roller perfectly straight. If it is not loaded straight it will not wind straight, and if it does not wind straight it will jam, in course of use, and perhaps even stick and refuse to wind off at all. To the male mind, which immediately enquires on what principle the



In a Cornish Church, Lelant.

By Sydney H. Carr.

mechanism works, this fact is patent, and at the very first trial he will take pains—needless pains sometimes—to thread the paper mathematically straight into its receiver. A lady photographer, unless the principle is pointed out to her, seems usually to ignore it, and will push the paper into position with gay carelessness—often right, but sometimes disastrously wrong. Once she has seen the effect of wrongness, though, she loads it, as I say, with beautiful accuracy, and with far greater rapidity than that of which most men are capable.

(To be concluded in our next issue.)

Although cartridges and film packs can be loaded and unloaded in daylight, it should be borne in mind that the exclusion of the light depends simply upon certain surfaces of black paper being kept in contact. Therefore, loading and unloading should not be carried out in a stronger light than necessary, and exposed packs or spools should always be put back into their boxes for transport.



Marine Work on the Solent.

Written and Illustrated by F. W. Becken.

Special to "Photography and Focus."

NOW many amateurs this year will make the seaside their holiday resort, and how many failures and disappointments will result from the numberless exposures that are sure to be made? For, most certainly, in no other branch of photography are there so many possibilities for the enthusiastic amateur photographer as when dealing with the sea.

It has been the writer's good fortune to be for many years associated with the Solent, and a happy hunting ground it has proved to be. Ever fascinating, either under the shimmering sunshine of summer, or swept by the stormy blast of winter, it presents a field of work abounding with opportunities for all, from the most advanced pictorial worker to the tyro who has just bought a Brownie. Bounded on the north by the wooded shores of Hampshire, and on the south by the long rolling hills of the Isle of Wight, it can safely be said there is no prettier sheet of water in the world than the Solent.

Perhaps the strongest feature of the Solent is the fleet of white sailed yachts that covers the waters during the summer months. Sheltered on all sides from the rough weather of the Channel, no other place is so suitable for yacht sailing and racing. Every day during the summer races are held by one or the other of the clubs, whose clubhouses are at the various ports on the coast, and often at these races charming groups are to be obtained if one can only seize the opportunity.

Excellent pictures can often be obtained from the pier heads at Cowes, Ryde, or Southampton. Any make of camera almost will do for this work, provided it is of fairly stout build. A shutter working up to, say, $\frac{1}{250}$ th of a second is a necessity. If the work is to be done on the water, a waterproof focussing cloth should be got, cutting holes for the lens and view finder, and then arranging it so that it completely covers the camera. Salt water is the ruination of brass fittings and bellows.



Hoisting the Jib Topsail.

By Frank W. Becken.

This acts as a covering or dark cloth, and the view is so much the clearer and more distinct.

The lens must be one of very long focus—15in. is not too long for a quarter-plate. One of the chief difficulties is getting near enough. The usual 5in. lens on a quarter-plate is almost useless; one would have to be so near the object as to be in danger of getting run down. The photographer would also be treated to a little parliamentary language at the same time, hardly fit for publication, so by all means use a long focus lens. It must be capable of working at a fairly large aperture, say $f/8$, as this will give one the opportunity of working in dull weather or late evening.

Nine out of ten subjects are best when exposed against the light: the beautiful shadings on the white sails and the half-tones on the water are all intensified.

To release the shutter if it has a ball and tube, the ball should be put into the mouth. This allows both hands to be used for steadying the camera. If the photographer happens to be in a small boat, he will probably find, if he is unused to the work, it will take him all his time to steady himself. Small boats also have a nasty way of wobbling just when the exposure is to be made: but this is a detail.

The exposure on the sea is often regarded by amateurs as difficult to determine. The subjects most difficult to gauge



Lee Race—Awash.

By Frank W. Becken.

If the camera has a good large finder so much the better, the glare of light on the sea renders it very difficult to get a quick sighting on the small brilliant finders so often fitted to cameras nowadays. The best form of finder is the direct vision, and it will be found very convenient to have the ground glass set back in the tube some three or four inches.



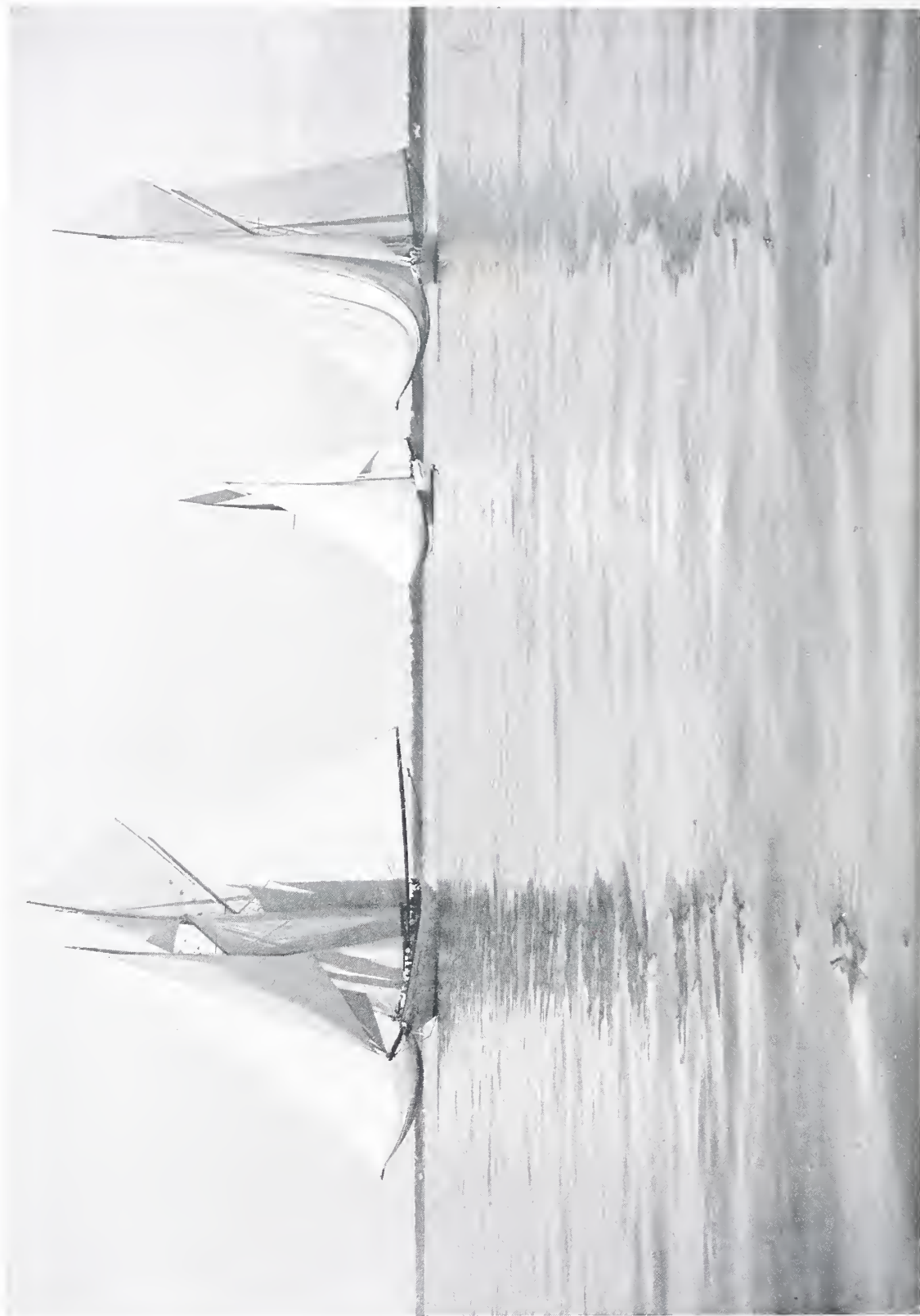
A SILVER SEA.

BY FRANK W. BECKEN.

are those taken when working with a strong sun at one's back, the subject a white-sailed boat, with brilliant reflections, and the sky a bright blue. For this a plate of medium rapidity, preferably orthochromatic, and an exposure of $\frac{1}{50}$ th of a second at f/11 should give a correct result. A four or six times screen, with a special rapid orthochromatic plate, could be used with advantage on such a subject, but it is not often that one is enabled to give sufficient exposure to permit the use of a screen; neither is it always necessary,

as there is always, of course, the danger of over-correction. These marine subjects are so different from ordinary landscapes. Their beauty lies in their delicacy, and if there is the slightest tendency towards harshness through under-exposure the whole effect is spoilt; the water appears as lumps of ice, and the clouds, if any, are so over-developed as to be unprintable.

Orthochromatic plates should be used whenever possible, but for the very fastest work every satisfaction is given by



BY FRANK W. BECKEN

THE THREE GRACES.

using non-orthochromatic special rapid plates. One point, however, should be borne in mind—whatever brand is in use, the plates should always be backed.

Focussing must nearly always be done with a scale. It is seldom the opportunity occurs for focussing on the subject before exposing. The judging of distances on the water is very deceptive, and will be found very difficult until one has had considerable practice.

As regards the position of a boat, a small craft should never be taken from a high point of view, but low down, to give a proper perspective, but this does not matter so much in the case of large vessels. The best position for a sailing boat is the leeward side—that is, the side from which the

wind is blowing—and a little before the bows. This is quite the best position as it gives a fine suggestion of speed, and also gives a view of the decks. Another good position is from the same side—the leeward—but taken astern when the boat has passed, the swirl of the water in her wake often giving a fine effect.

There is no great difficulty in obtaining an ordinary snap shot of one of these racing craft, but the difficulty lies in obtaining an artistic rendering. Some people see nothing pictorial in one of these smart boats with her canvas bellied out into graceful curves, seeming almost to fly on the top of the waves, but, surely, with proper treatment, these subjects present exceptional opportunities.

Travel Notes for Photographers.

By Marshall W. Leigh.

Special to "Photography and Focus."

NEVER experiment on a tour.

Never take away untried apparatus or material. If the camera is a new one, contrive to have at least a day with it beforehand, and develop the results. Buy all the plates or films likely to be wanted in one lot; see that all bear the same batch number; and expose and develop some out of one box before starting.

AN exposure meter is a necessity.

Different localities differ in the strength of the light. Exposures in Switzerland are not the same as exposures in North Wales, and so on. There is only one way of meeting this difficulty successfully, and that is to use an exposure meter.

PROTECTION from prying eyes.

Plates or films should never be so left that they could be exposed to light and protected again without their owner being any the wiser. A little strip of gummed paper may be put across the joint of each dark slide and its shutter if this has to be left about; but a better method is to have a camera case with a lock and key. Boxes of exposed plates should be wrapped up neatly and the paper gummed down.

AN extemporised dark room.

It may sometimes happen with magazine cameras or changing boxes that something has jammed, and further work until a dark room can be reached seems impossible. It is possible at times to extem-

porise a dark room in which the matter can be put right. The jacket is taken off and laid on a table, with the camera underneath. The arms are inserted in the sleeves, the back of the camera opened, and the readjustment made by feeling. To minimise risk, this should be done indoors if possible, or where there is no stronger a light than can be helped. A blanket or rug may be thrown over the jacket, and its edges held down by a companion, as an additional safeguard; but the dodge has been used with success when the photographer has had no helper and has been compelled to carry out the whole procedure on the grass in the open air.

GUARD against unexpected light.

Before starting to change plates at night in a strange room, lock the door, close the shutters, and pull down the blind, no matter how dark it may be outside. Otherwise it may happen that some light is unexpectedly switched on when exposed plates are lying about, and valuable exposures may be ruined.

LEARN to change in the dark.

Never trust to the red light in a strange dark room. Learn to do all the changing by feel alone; and when all is ready put out the light and begin. Not only is this safer, from the red light point of view, but in the darkness any stray light may be more quickly detected and guarded against.

USES of gummed lantern-slide binders.

Always carry a few gummed lantern slide binders in the camera case—the long ones for choice. They can be used for all sorts



SUNLIGHT AND SHADOW.

By H. SMITH.

Awarded First Prize in the Beginners' Competition for May.

of odd jobs. They will remember only to get the exposed plates or smashed focussing screen will lead on and on to the screen on the lens, will serve to extend the stay of the pinhole, to protect plate boxes or dark slides from prying eyes and will not be used in any other way.

◆ ◆ ◆

Some care should be taken in changing.

If changing is done only at night, it should be done every night that there are any exposed plates or dark slides or slides, so that the photographer starts out each morning with his full complement of unexposed plates.

◆ ◆ ◆

EXPOSURES AT HOME.

It is bad policy to park the camera in a dark room and

leave it to its fate. Before leaving a place where any length of stay has been made, the different things should be checked over and put in order.

◆ ◆ ◆

EXPOSURE AT HOME FOR DEVELOPMENT AT HOME.

Some workers take a small supply of chemicals and a dark room to develop a few plates en route to make sure that the exposures are, on the whole, correct. If this is the case, it is a good plan to expose two plates on the subject selected for the same time, of course, so that the test plate is not actually required. It often happens that while it is easy to develop and fix it sufficiently to show if the exposure were right or wrong, it may be difficult to wash it properly, or it may get injured in travelling. Besides, there is always a greater likelihood of the negative being a



The River and Trees.

E. F. Stevens.

on road. It will often be found that some of the most interesting incidents of a trip are those which occur in the course of one's travelling. But on reaching the destination the plates will have been in the slides or camera during the journey should be changed, whether they are exposed or not, and if the latter, only used when shortness of supply makes it a necessity. Plates which have done a long journey in dark slides or cameras are almost invariably damaged by pinholes, caused by dust which settles on the plate after exposure. It is not likely to give clear results of such trouble.

◆ ◆ ◆

MAKE A LIST AND CHECK IT OVER.

A list of every individual item of the kit should be made very carefully, before starting, sparing no pains to be sure

good one if it is developed and finished off at home, and not in some unfamiliar and perhaps extemporised dark room.

◆ ◆ ◆

NUMBERING PLATES BACK OR DOWN.

If the plates are to be numbered, this can be done with a finely pointed pencil on the film side, right in one corner. Small numbers are not very easily read in the dark room, although they will survive all the after processes and be legible on the finished negative. If the plates are backed, a pencil may be used, and the numbers writ large on the backing; it depends on the backing itself whether it is easier to write them so that they can be read by reflected light on its surface or by scratching right through the backing so that they can be read in looking through the plate. Either method will be found to answer.

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NEWS... from all... SOURCES



TO SECRETARIES AND REPORTERS.

We wish to remind secretaries and reporters that when reports are sent to us and do not appear, it is because such reports are not suited to our columns. We are always glad to give Societies what publicity is possible, but abstracts of lectures or demonstrations cannot be inserted. Actual statements made by the lecturers, or details of photographic interest, are always welcome.

THE JULY SECOND-HAND CATALOGUE of the City Sale and Exchange, 54, Lime Street, London, E.C., has just been issued. It will be sent post free to any reader on application.

"PHOTOGRAPHY" PRIZE SLIDES, 1907, have just come back from the Amateur Photographic Society of Rotterdam, whose secretary writes: "We think it was the finest collection we have ever received for projection."

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Science and Practice of Photography.

By CHAPMAN JONES, F.I.C., F.C.A., F.R.P.S.
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THERE IS AN International Exhibition of Pictorial Photography now open at the Laing Art Gallery, Newcastle-on-Tyne.

x x x x

A SIMIL BOOKLET has been issued by Messrs. Newman and Guardia, Ltd., of 90 and 92, Shaftesbury Avenue, London, W., giving particulars of this very attractive little pocket camera.

x x x x

THE BLOCKNOTE ENLARGEMENT recently referred to in *Photography and Focus* as typical of big work done with a small camera is now on view in the photographic section of the Franco-British Exhibition.

x x x x

AN OUTING IN A FISHING BOAT was arranged for the 27th ult. by the Southend-on-Sea Photographic Society, and proved very enjoyable, although the stiff breeze that was blowing put photography out of the question.

x x x x

THE NATIONAL PHYSICAL LABORATORY advises us that the Physics and Engineering Departments will be closed from July 27th to August 8th inclusive, only a small staff remaining to deal with matters of extreme urgency.

x x x x

THE TORBAY CAMERA CLUB. Mr. G. Drury having resigned the honorary secretaryship, the duties have been taken over temporarily by the president, Col. W. Fothergill Macmullen, of Homelands, Babbacombe, Torquay.

x x x x

"PHOTOGRAPHY IS VERY WONDERFUL," said the horseman. "The other day I had my picture taken in my riding togs—not on a horse, you know, but just standing up with my crop in my hand; and now the photographer writes to tell me my pictures are all mounted." ("Bulletin of Photography.")

x x x x

THE SANITAS ELECTRICAL CO., LTD., of 61, New Cavendish Street, London, W., has issued a large and fully-illustrated catalogue of its manufactures. A hundred pages alone are occupied with X-ray apparatus, interrupters, focus tubes, etc. The list should certainly be in the hands of every medical man.

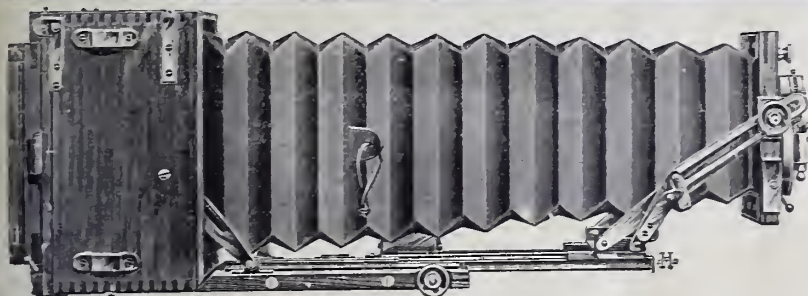
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THE GOLDONA COMPETITION, which is being held by Messrs. J. J. Griffin and Sons, Ltd., of Kingsway, London, W.C., closes on July 31st. The competition, which is open to amateurs only, is for prints on Goldona paper, and the prizes, twenty-three in number, range from 25 3s. to 5s.

x x x x

THE LONDON AND PROVINCIAL PHOTOGRAPHIC ASSOCIATION at its annual meeting elected the following officers: Trustees, T. E. Freshwater and A. Haddon; committee, J. S. Teape, H. C. Rapson, R. Beckett, A. E. Smith, J. Burgess, W. R. Stretton, Chas. Greenwood, and O. S. Dawson; lanternist, E. T. Wright; librarian, W. J. Ferry; honorary secretary, treasurer, and recorder, Ernest Human; affiliation delegates, H. C. Rapson and Ernest Human.

There are Six Models of the "Sanderson."



This is a model of the celebrated "Sanderson" Camera, which is constructed of selected Teak, a wood recognised for its great damp and heat resisting qualities. The outside woodwork is polished instead of being leather covered, for leather covering is sometimes liable to rot and peel when exposed to a damp atmosphere. The cameras are brass bound in all vital parts, and the bellows are specially attached with brass plates to the body of the camera. The "Tropical Sanderson" can be confidently recommended for export to India and the Colonies. It is essentially the traveller's camera, for nothing is sacrificed to appearance, and every practical point has been considered.

No. 1. Tropical Model Sanderson Hand Camera, complete with Beck Double Aplanat Lens. F/7.7 Unicum or Automat Shutter, Brilliant View Finder, Level, three Special Teak Double Plate Holders.

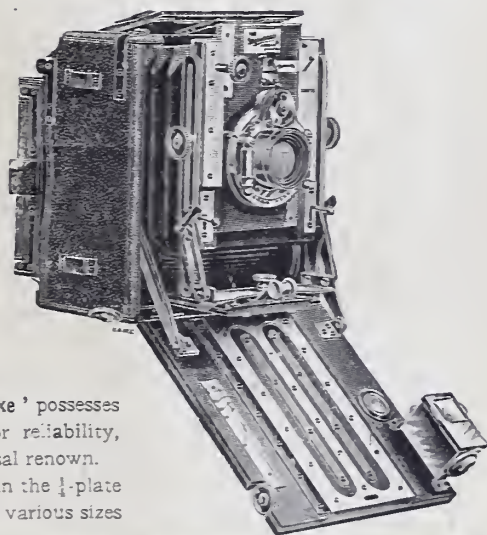
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Any lens or shutter can be fitted to the "Tropical Sanderson." See price list. Houghton Film Envelope Adapters are specially made in Teak for this model.

This wonderfully perfect model, the "Sanderson de Luxe," has been introduced for those who require an instrument of the most perfect finish and quality of workmanship it is possible to produce. The Body is different to the regular model. There is a new Back Focussing Rack and Pinion for wide-angle work, a Rack and Pinion Rising and Falling Front, a closed-in Focussing Chamber, and a Patent Stop Plate.

The Make and Finish of the "Sanderson de Luxe" are of the very best, the woodwork being of well matured Spanish mahogany, specially selected for its soundness, richness of colour, and fine figuring. The cabinet work is faultless, and the covering of the finest Black Morocco Leather. In short, the "Sanderson de Luxe" possesses all the characteristics of British workmanship, which for reliability, excellence of quality and substantiability, are of universal renown.

The "SANDERSON DE LUXE" costs £10 0 0 in the 1/4-plate size. Ask for the Booklet giving particulars of all the various sizes and the cost of the De Luxe Models with different lenses.



If you are interested in the subject of "Sandersons," send a postcard to the manufacturers and get a free copy of the "Sanderson" Booklet. It goes fully into the whole "Sanderson" question, and it is fully illustrated. All the best dealers sell "Sandersons."

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Photography without a Camera.

Professor Lippmann, of Colour Photography Fame, has invented a plate which is merely held up to the object to be photographed, without any camera or lens, and gives a picture with stereoscopic relief and unlimited depth of field.

HOW THIS IS ACCOMPLISHED SIMPLY EXPLAINED.

The Manufacture of the Plates on a Commercial Scale not yet possible.



PROFESSOR LIPPMANN'S latest invention, which strikes out an entirely new line in photographic work, has already been briefly referred to in our columns. We are now able to supplement our earlier reports with a detailed and illustrated explanation, which M. Mercier, of Paris, has contributed to our contemporary "Camera Craft." At present there are considerable technical difficulties to be overcome before the plates can be manufactured commercially, but the scientific interest of the discovery cannot be questioned for a moment.

It is based on the analogy between the photographic camera and the human eye. The camera, writes M. Mercier, like the single eye, has the disadvantage that it sees from but one point of view, and gives no evidence of relief. This is overcome when both eyes are used or two lenses are employed, as in the stereoscopic camera. The human eye, like the photographic lens, has little depth of field, and, like some forms of lenses, it has a very narrow angle.

If we look at a distant object, another object much nearer the eye is not seen distinctly. By placing a card pierced with a small hole directly in front of the eye this disadvantage is removed, but only by sacrificing much of the light that is allowed to reach the retina. This is analogous to stopping down the photographic lens to secure depth of field.

Many insects, however, are not thus hampered: their eyes are multiple—that is, they are made up of an assemblage of minute lenses, each forming its own independent image on its own minute retina. It is a principle somewhat analogous to this last that Professor Lippmann employs in a photographic way, just as the camera and lens of the present employ almost identically the principle upon which the human eye conveys to the brain the visual image of objects before it that are capable of reflecting light enough to form an image, either upon the retina of the eye or the sensitive photographic emulsion within the camera.

While M. Lippmann's results have been secured on "plates" that were given their "honeycombing" effect by hand, and the intervening walls of the cells made opaque with a fine brush, we can best investigate the invention by imagining that the difficulties of manufacture have been overcome. Doing this, we will suppose that a "plate" made up of microscopic cells, some ten thousand or more to the square inch, of such a form as that shown in the small illustration herewith. These

are supposedly made up of collodion, and so formed that the relation between the radii of curvature of the front or lens forming surface and the back or image receiving surface of each cell be equal to $n-1$,



n being the refractive index of the collodion. This relation of curvature ensures perfect focus over the entire back surface of each cell; this surface carrying the photographically sensitive salts that will, later, form the microscopic image at the back of each cell, under the action of the developer. The side walls of each cell are rendered opaque during our imaginary process of manufacture. As the focal length of each little cell or miniature camera is but the thickness of the film, all objects beyond a microscopical distance from the plate are in focus.

As we have shown, each of these cells is now capable of forming its own individual image of the entire object before it upon its own section of sensitive film, the image changing slightly as the incidental angle changes from point to point of the object being photographed. In this way, this new plate acts much as does the composite eye of the coleopterous insects, made up in some cases of hundreds of thousands of separate eyes, all acting together to give the insect the power of seeing with its immovable eye much more than can the human being with his movable organ of sight.

Supposing that our plate has been developed and the image made a positive one, it is evident that if we view slightly from the side, this aggregation of cells in close juxtaposition, by transmitted light, as in the case of a transparency, which it, of course, is, we shall not see the repeated array of images, for the reason that the accommodation of our eyes will give us but one part of each image, the assemblage of all these points giving a complete image with stereoscopic relief, the full size of the plate.

It is evident that, in viewing our transparency by transmitted light, the rays of light emerging from the lens side of each cell must be parallel rays, as they originate with the positive image at the back of each cell, such origin being at the focus of the lens of the cell from which it emerges. As the direction of these emerging bundles of rays is exactly the same as that of the incident bundle that was concentrated upon the lens surface of the cell during the exposure of the plate, the eye perceives the photographic image formed by the combined images of the juxtaposed myriad of cells, just as it would were the eye turned directly upon the object photographed.

PRINT THOSE SNAPSHOTS.

In these days of pressure it is necessary that the best prints be obtained in the shortest possible time with the least trouble. In addition, you want prints which require no mounting and which are ready to send out to your friends without further trouble. All these advantages are obtained by using

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Last day for posting
Competition prints, June 30th.

Our illustration herewith may help to make this matter clear. The eye X is supposed to be viewing both the object and developed positive plate from the side. The cells are, of course, shown greatly enlarged, and only an imaginary row for the purpose of making the direction of the rays clear. As can be seen, the eye X receives at its optical centre the photographic

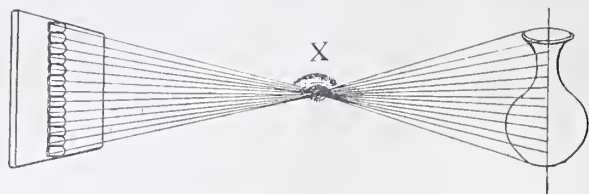


image of each cell in exactly the same manner as it does that of the object itself. The same holds good for any other portion of the object, and its corresponding image in the myriad of microscopic eyes. As the directions of the bundles of rays entering the optical centre of the eye are preserved, the angle and apparent magnitude of the different component parts are also faithfully retained. The proper aspect of every part being maintained regardless of the position of the eye, the use of our two eyes ensures the sensation of relief in the same way as in viewing the actual object which has been photographed.

Presentation to Mr. F. K. Hurman by the Staff of Hurman, Ltd.

A BEAUTIFUL sundial on a support of Portland stone was presented to Mr. F. K. Hurman by the combined staff, numbering fifty-five, of the three Hurman houses on his retirement from the directorship of Hurman, Ltd. The present, which weighed half a ton, was sent by rail to Mr. Hurman's country house, on the Quantock Hills, but wires from the three houses were simultaneously despatched on the 30th ult., and the health of the recipient was drunk at noon, solar time, on that day.

Mr. Hurman, who will have the best wishes of all his many friends on his retirement, has had a long photographic innings since 1870, when he first came into contact with the photographic business with Messrs. Mawson and Swan. Those were the collodion days, when dry plates were made with beer, coffee, etc., and the chief names in the photographic world

As suggested above, the image is secured as a negative which can afterwards be made positive, as in the case of an Autochrome plate. However, the copying of a negative upon another like plate, and in this way securing any number of positives, is simplicity itself, not even contact being required, as the procedure is but a repetition of the first one, with the exception that the negative is made the object to be photographed in place of the original subject. As to the angle of view obtained upon the plates, this, of course, depends upon the lateral aperture of the cells. If these be equal to one hundred and twenty degrees, there will be just that amount of the object included upon the plate.

Regarding the actual manufacture of the plates, it is suggested that this might be done by employing two films of collodion, each of which has been impressed with its own portion of the "honeycombed" or cellular pattern, and then secured together, with the depressions in one in absolute register with those in the other. This might make possible the formation of the innumerable lenses upon one sheet and the opaque walls with the corresponding sensitive posterior portion of each cell on the other, thus forming the complete plate. Minute spherules of glass, imbedded in collodion, have also been given consideration as a possible method of production.

were Carey Lea and Col. Stuart Wortley, and the only dry plate manufacturers then in the business were the Liverpool Dry Plate Co.

"I knew a civil engineer," Mr. Hurman told us, "who worked a 15 x 12 outfit in the field even in those days, when it entailed carrying collodion, developers, and a portable dark room to the landscape that was to be photographed, and a hunt for water for washing, etc., was an incident." After this, his first experience of photography, Mr. Hurman acted as traveller for the late J. T. Chapman, of Manchester, "for five happy years," and then founded the well-known business at Newcastle-on-Tyne. Later on he also acquired the business of Marlow Bros., of Birmingham, which became a branch of Hurman, Ltd., and finally another branch was established at Dublin.

A Safe Light for Developing Autochrome Plates.

AS was set forth in *Photography and Focus* recently, Messrs. Lumière had worked out a method by which it was possible to control the development of Autochrome plates, to compensate to a large extent for under or over-exposure. The silver intensification process to which an Autochrome is submitted renders this quite a practical and successful method, and we have been using it lately, and were very pleased with the way it worked. There is no need to set forth here the composition of the developing solutions and the way in which they are to be used, as that was all given on page 106 in our issue for June 9th; but we may remind our readers that it is based on the timing of the appearance of the image, and on the fact that after the plate has been immersed for a few seconds in the developer it loses a great deal of its colour sensitiveness, and may be examined in a deep red or green light.

The nature of this light is very important if the plates are not to be fogged, and the usual red screen to be found in dark room lamps is not at all suitable. Messrs. Lumière have therefore put upon the market thin transparent paper dyed with suitable dyes, which enable a perfectly safe light to be got very readily. The new papers are known as "Papiers Virida," and are supplied in packets of ten pieces—five yellow and five green. A sufficient number of these must be superposed, enclosed between a couple of glasses, and inserted in

the lantern. In our own case, using a lantern with incandescent gas, but so arranged that no direct light from the mantle reaches the glass, we found that three of the yellow and two of the green papers gave a light in which the appearance of the image could be easily seen, but which had no fogging effect on the plate. More light than is actually required should not be used, but we may point out that with one plate we left it lying unprotected in front of the lantern from the first examination until development was complete, but were quite unable to detect any injury from so doing. There is no need, of course, to do anything of the sort. The plate should be kept covered for the first twenty seconds of development, to allow time for the developer to desensitise it, and thereafter it should be glanced at from time to time, but in the interval between each examination the card or other cover should be put over the dish.

The yellow papers should be put next the source of light, say the makers, and they point out that the plates are sensitive to the light transmitted through these papers until they have been soaked in the developer.

The price of a packet of ten papers 7in. by 5in. is 1s., 8in. by 8in. 2s., and other sizes are supplied at proportional prices. They are supplied by the Lumière N.A. Co., of 89, Great Russell Street, London, W.C., and will no doubt be heartily welcomed by many Autochrome workers.

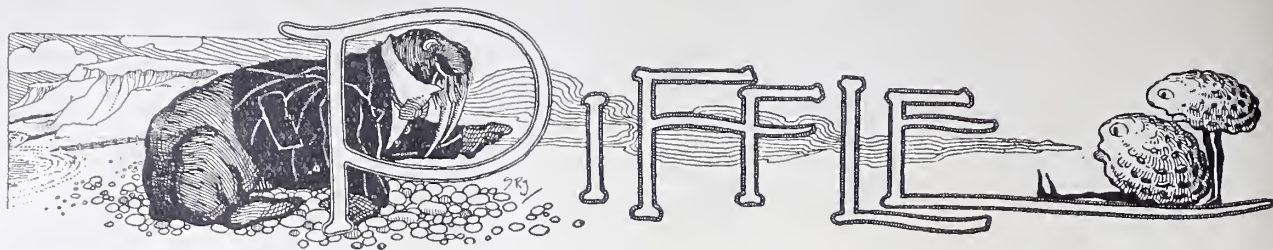
Wellington

S.
C.
P.



THE
"QUEEN"
OF
GASLIGHT PAPERS.





"The time has come, the Walrus said, to talk of many things."

WITH the exception of the "Police News," as to which I have no information, I believe that every paper published in this country has its photographic column. I often wonder who writes some of these columns. Years ago one would have suspected the office boy or the charwoman, but a present day holder of either of these honourable and necessary positions could be relied upon to do something far better than the stuff in the said photographic columns. I admit that occasionally in glancing over these fearsome screeds I come across some gem of wisdom that shines forth resplendent from its dingy surroundings, but when that *does* happen, it bears a strange air of familiarity, and I discover that it is nothing less than a quotation from "Piffle."

* * *

Assuming that photographers do sometimes read these contrived columns I wonder if they ever follow the Solomonic advice given. For example, a photographer is away on a holiday, and is anxious to know whether his exposures are about right. I don't sympathise with him in his anxiety at all. It serves him right. If he made no exposures he would have nothing to worry about. Still, being a photographer he is an ass, and, being an ass, he is photographing when he might be having a real good time. Now comes the photographic column writer to his aid. He is advised to develop a sample plate in the still night and his bedroom. He is to place the plate in a borrowed soup plate. If the plate (photographic) is a 10 x 8 or a 15 x 12 he must have several plates (soup) to hold it, I presume. Then he is to pour over it one and a half ounces of developer. I ask anyone who doesn't know to try the experiment of putting one and a half ounces of fluid in a soup plate. It wouldn't come up to the dry plate's ankles, let alone cover its face. The writer advises that a second soup plate be put over the first during development, and here I agree with him. It would be a mournful spectacle to see one and a half ounces of developer trickling sadly about the wide expanse of the china desert, and making vain attempts to scale the steep and glassy sides of the negative tableland. Mr. Baskett would probably advise saving one's soup from dinner, keeping it till cold (if not already so), adding some dry pyro and a knob of washing soda, and flopping the plate into that, if you must develop it. The soup could then be warmed up for supper by holding lighted matches under the plate.

* * *

Another column writer asserts that in photographing lightning flashes the best results are obtained at night. Very likely he is right. If the plate were left exposed for ten minutes or a couple of hours by daylight while waiting for a flash there might be some chance of over-exposure. My own most successful lightning flashes have been obtained by fixing a plate without development, washing and drying it, and then drawing on it some ink lines with broken backbones. These are not correct electrical flashes, but are exactly in the style of the Old Masters whom we photographers are so often urged to imitate.

* * *

I have also come across some sage advice about shutters. If you find your plates are under-exposed you must take your camera to a dealer and have the shutter slowed down. It should be made to work at about one-twentieth of a second, as that will be quite fast enough "especially during the next few months."

* * *

The assumption here seems to be that once you have got through the next few months and the dull days again arrive you may safely take the camera again to the dealer and

get him to give it a stimulant so that the shutter will sprint at about a millionth of a second in readiness for your winter work. This is in accordance with the well-known axiom, the stronger the light the longer the exposure.

* * *

Another authority suspected his shutter and had it reliably tested. He was told it gave only half the exposure indicated. It was a fifty per cent. liar. This was really not bad for a shutter, but he had it reliably tested again. He was told it gave double the exposure indicated. It was evidently doing its best to please. But the authority on shutters was still dissatisfied, and he advises all photographers to send their shutters to a good firm who will make them work exactly to the speeds marked on them. Unfortunately he does not name the firm. If he had done so I would have sent them a particular shutter of mine on which I would mark the speeds I want. They could not make that shutter work to one of the speeds, let alone all of them. Although it cost eightpence it never would work. It was never meant to work. It was only made to sell.

* * *

And I bought it.

* * *

You can tempt that shutter by writing all sorts of alluring speeds on it from $\frac{1}{1000}$ of a second to a Leap Year, but it won't budge.

* * *

One other case. A writer quotes Mr. Wratten as saying that one-fifth of a second is quite rapid enough for street work, and then adds, "I agree with him in this, and, indeed, will go further and assert that frequently a speed of one-twenty-fifth of a second will suffice." In other words, although this photographic expert approves of a certain slow speed he is prepared to advocate one still slower, namely, five times as fast!

* * *

I say nothing about the statement that one-fifth of a second is fast enough for street work. It may be. Some streets have no more life in them than a mausoleum. If the passers-by are going to business in the morning an exposure of half an hour would show no sign of movement; but if they are going out to luncheon a focal plane shutter, with the narrowest slit and the highest tension, at once becomes a necessity. One might as well lay down rules as to the correct exposure for a motor 'bus. If you are on it, it comes under the head of still life; if you are trying to dodge it when crossing a road, it belongs to the same class as flying bullets, or thunderbolts.

* * *

Even if you happen to give the right exposure they will very likely forget to put your camera in the ambulance with you.

THE WALRUS.

SUBSCRIPTIONS.

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PHOTOGRAPHY. JULY 14TH, 1908.

PHOTOGRAPHY

A·JOURNAL·FOR·EVERY·CAMERA·USER.

EDITED·BY·R·CHILD·BAYLEY.

PUBLISHED WEEKLY.

JULY 14TH, 1908. TUESDAY. No. 1,027. Vol. XXVI.



EVENING SUNSHINE.

BY J. E. MUTER.

Awarded a Bronze Medal in the Advanced Workers Competition for June, 1908.



The Aurora Borealis.

A great many of our readers must have been amongst the fortunate ones who saw what most supposed to be the extraordinary sunsets of a few nights ago, which are now known to have been auroral displays. The northerly position of the phenomenon as well as the lateness of the hour showed that it was not likely to have any direct connection with the sunset. At eleven o'clock on two nights in succession the northern sky glowed with light and colour, the display being more brilliant than any that has been seen in these latitudes in the past quarter of a century.

Photography Possible at Eleven at Night.

An excellent proof of the brilliance of the display is given in the "Huddersfield Examiner." Mr. H. H. Luther, of Market Walk, Huddersfield, on Wednesday, 1st inst., made an exposure at 11.15 p.m. Setting up his camera at the bottom of the old Rifle Field, with the lens turned in the direction of Trinity Church, he gave an exposure of a minute and a half with a Barnet orthochromatic plate, and obtained a photograph "in which the detail came out with remarkable clearness. Trinity Church and tower, with the flagstaff on the latter, stand out prominently against the northern sky, and even against the darker background of trees, lamp, and telegraph posts are easily discernible." And this was obtained with an exposure of a minute and a half not three-quarters of an hour from midnight. It is a good example of taking advantage of an opportunity to secure a photograph that must be in its way unique, and we congratulate Mr. Luther upon his success.

Competitions and Results.

This issue will be found to contain the results of no fewer than four of our competitions—the "Special Subject," "Advanced Workers," and "Beginners'." Competitions for June, and the Title Competition. The great popularity of this feature of the paper is very encouraging, and we hope very shortly to bring out further novelties in this direction. In the meantime, may we remind our readers that the first three com-

petitions mentioned above are regular features of *Photography and Focus*? We cannot spare the space to print the rules and conditions in full every week, but do so as often as we can. This week they will be found on page 213. The omission of the rules for a week does not mean that the competitions are not being held. The result of the advertisement competition will be published next week.

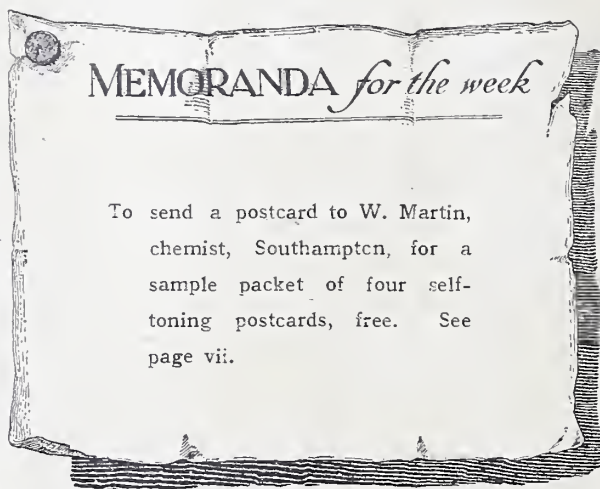
Photographs from Balloons.

Visitors to the Franco-British Exhibition ought not to miss a very fine collection of balloon photographs—the finest, in fact, that we have ever seen—which are exhibited by the president of the Aero Club du Rhone. They are in the form of transparencies, and are at the extreme end of the French Applied Arts Section in the galleries between Wood Lane and Uxbridge Road. To anyone entering at the Uxbridge Road entrance and passing through the galleries they will be one of the first French exhibits

to be met. The detail and the definition of the pictures are most remarkable, and there is none of that general flatness or lack of contrast which characterises so much balloon photography, and is usually attributed to the pictures being taken from the same direction as that from which the light falls on the subject.

Exposures and Clouds.

We were very glad to see in the "Westminster Gazette" the other day some observations on this subject on lines which we have often laid down in *Photography*, but shall doubtless have to lay down often again. We refer to the fallacy of supposing that with cloudless skies and a bright sun exposures are much shorter than they are when the light is not so intense and the sky is cloudy. Of course, when the weather is actually dull the exposures are longer than when it is bright, but we are not referring to such extreme cases as those. Many a photographer who has gone to the South of Europe with his camera has been disappointed to find on his return that he has been under-exposing, in spite of the apparently intense powerful sunlight and an unclouded sky. The



secret of the trouble lies in the sky itself. So long as the chief shadows of the picture are without detail the negative will be under-exposed, and it is just when the sky is without the great white reflectors (the clouds) that the shadows of our subjects are intensely dark. Those parts of the scene on which the sunlight falls may be far more brightly lit than they would be under the cloudier skies of this country; but that is not to the point. We have to "expose for the shadows," as the old photographic proverb has it, and without clouds to act as diffusers and reflectors of the sunlight, the shadows are deceptively dark. For that reason we utter once more a warning against being deceived by a cloudless sky into under-exposing.

DAYLIGHT SAVING.

Joe Elderton's family often remark
That he isn't a fellow to rise with the lark,
So last week he determined, for once in a while,
To prove they were wrong, and to give it a trial.

So he got up at six, or at least, so he states,
With the laudable aim of developing plates.
And he doubtless thought very small beer of that lark
As, yawning, he shut himself up in the dark.

They waited at breakfast ten minutes or more,
Then sent his young brother to knock at his door.
The bedroom was empty, of course, as we know,
So they started an agonised search after Joe.

Till, thitherward drawn by the sound of a snore,
They went to his darkroom and opened the door,
Where a beautiful vision of Joe met their view—
Fast asleep, with his head in a dish of M.Q.!

Uniformity in Lantern Slides.


A letter in "Nature" draws attention to the inconvenience which is occasioned by the want of uniformity in density in the lantern slides by different workers when these are used to illustrate a lecture. The writer, Mr. G. H. Bryan, suggests a photometer method for getting uniform results from negatives widely differing in density. He describes how an isosceles prism of white cardboard is fixed up, while two of its surfaces are lit from two sources of light, on opposite sides of the prism, and two negatives to be compared are placed side by side in front of the two faces and examined by the light reflected from the cardboard. By moving the lights near to or further from the card, its illumination can be adjusted until the two negatives look equally dense.

If these lights are equal, and the angles which they make with the card are equal, the proportional exposure for the two negatives can be easily determined, provided always the negatives do not differ in colour. The proposal sounds a simple one, but we cannot help thinking that, with a very little practice, any one of ordinary intelligence could do quite as well, if not better, by estimating with the eye only. The real trouble in scientific lectures, as a rule, is not so much due to the difference in density of the slides of different workers. So long as they can make a passable slide at all the audience is not worried. It is when good slides and things which can only by a stretch of courtesy be regarded as slides at all are mixed up together that the practice becomes an annoyance. Those whose sad lot it is to have to attend many scientific lectures know that some of "the authorities" in their own line are not ashamed to show slides of the most miserable technique. Apparently, they are quite unconscious of their shortcoming.



Forthcoming Events

Societies will have their meetings announced here if the syllabus is sent to us at the beginning of the Session or from time to time.



MONDAY, JULY 13TH.

Bedford C.C. "Open Questions on Holiday Photography." .
Wallasey A.P.S. "The Carbon Process." R. A. Spy.
Southampton C.C. "Demonstration of Ozobrome." H. W. Miles.

TUESDAY, JULY 14TH

Batley & D.P.S. Bolton Woods.
Nelson P.S. Evening Ramble.
Nelson C.C. Holiday Experiences.
Royal P.S. Ordinary Meeting.
Darlington C.C. Still Life Composition. W. Dresser..

WEDNESDAY, JULY 15TH.

North Middlesex P.S. Home Portraiture. A. H. Lisett.
Balham C.C. "Faulty Negatives."
Leeds C.C. "Home-made Apparatus." W. W. Manfield.
Rugby P.S. Brandon and Wolston.
Devonport C.C. Dartmoor Ramble.
Southampton C.C. Brockenhurst.

THURSDAY, JULY 16TH.

Southamptonshire Natural History Society and Field Club. Oundle.

SATURDAY, JULY 18TH.

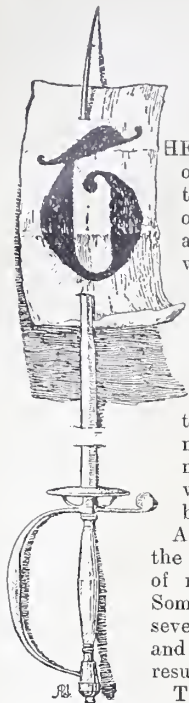
Lincoln A.P.S. Somerton Castle.
North Middlesex P.S. Great Gaddesden.
U. Stereoscopic S. Lea Backwater.
Woolwich P.S. Brentwood and Great Warley.
Woodford P.S. Visit to a Farm at Navestock.
Small Heath P.S. Tanworth-in-Arden.
South Suburban P.S. Car-halton and Beddington.
Barrow-in-Furness Naturalists' Field Club. Silverdale.
Preston C.C. Laban Yates.
Hull P.S. Flamboro'.
Windsor P.S. Marshfield.
Wallasey A.P.S. Liverpool Docks.
Halifax C.C. Calverley and Apperley.
Catford & Forest Hill P.S. Lower Pool of London
Cripplegate P.S. Buckhurst Hill.
Central Y.M.C.A. P.S. Hadley Woods.

MONDAY, JULY 20TH.

Walthamstow P.S. "Hints on Photographic Trees." R. G. Rolfe.
Blackpool & Fylde P.S. L. & C.P.U. Annual Excursion.

Simple Combination Printing.

By Clarence Ponting. Special to "Photography and Focus."



THE combining of two or more negatives in one picture presents unlimited terrors to the mind of the uninitiated, the chief objection being that the joins must be apparent in the finished picture unless the worker has had years of practice, and is, moreover, exceptionally clever in his manipulation of the printing frame. This is entirely a fallacy.

Workers who cannot hide the joins effectively in any other way—and it is very easy—must print their negatives through some diffusing medium. With this method, the sharpest of sharp negatives may be employed, and not even an expert will be able to detect that the picture has been improved.

Another objection to combination printing in the eyes of some photographers is the number of masks, etc., which are usually employed. Some workers even go so far as to make several transparencies, and by joining these and making a new negative obtain the desired result.

The method to be described requires no masks, special printing frames, or transparencies, and takes very little more time than the usual methods of printing. In short, it is "faking made easy."

Alterations to the Printing Frame.

The usual wooden printing frame is employed, but slight alterations must be made to enable us to use the larger piece



The background selected.



The foreground selected.

of paper required for this form of work. The springs must be unfastened and the hinged back removed. At each end of the frame will be seen two triangular wooden blocks, placed there to prevent the negative from slipping during examination of the print during printing. At one end (the end is immaterial) two of these little blocks must be removed. They are only glued on, and can be removed easily by means of a blunt tool, such as a cold chisel and a hammer. A sharp knock with the hammer will dislodge them. The printing frame is then ready for use.

The Printing Paper.

As prints made in this way are always panel-shaped, paper will either have to be cut down to the required size, or it may be ordered from the manufacturers cut to the requisite shape. The latter is advisable, as it prevents waste and expense. Those who wish to experiment with the method before ordering the paper can get the right size by cutting down half-plate paper in the case of quarter-plates, or whole-plate



The foreground as printed.

size when half-plates are used. The paper for quarter-plates will measure $3\frac{1}{2}$ in. by $6\frac{1}{2}$ in., and that used for half-plates will measure $4\frac{1}{2}$ in. by 8 in., although when having the size cut to order $4\frac{3}{4}$ in. by 9 in. is a better size. The makers will willingly cut the required size if not less than one dozen is ordered at a time.

The paper must be a printing out process of some kind, as it is important to be able to see the image during printing. Matt self-toning paper is admirable, but, if preferred, glossy P.O.P. may be used, and is to be recommended when the worker wishes to copy the finished print to make a negative of the combined negatives, for enlarging or lantern slide reproduction.

One thing more is needed before printing can be commenced. One can easily see that paper of the above dimensions in an ordinary printing frame will project some distance beyond the end of the frame, and unless it were protected in some way would quickly become discoloured whilst printing from the first negative. To protect the paper, nothing is better than the opaque envelopes in which P.O.P. is packed—red for preference. The flap of the envelope is cut off flush with the top, and then slipped over the projecting paper, until it is held securely in place by the flap of the printing frame. This opaque envelope should only be held by the flap by about one quarter of an inch. If it projects too far over the negative, the printing may be hindered. Its only object is to protect the surplus paper, which must be kept absolutely clean.

A focussing or other opaque cloth is the only other necessary item before we can commence the work of combination printing.

Joining the Negatives.

For the purpose of this article, a foreground and background have been combined into a single picture. The printing process employed in this case was glossy P.O.P., but even with this searching process the joins are not apparent.

Having selected the two negatives which we wish to combine, the next matter is to make sure that they will merge into one another and form a satisfactory composition. To do this, one negative is placed over the other in such a manner that the foreground and background negatives coincide with the length of printing paper. When in this position, they are held up to some strong light, such as an incandescent burner, in order that the light may pass through both negatives. It will be necessary to hold them very close to the source of the illuminant, owing to the increased density of the overlapping portions. If the composition appears satisfactory, printing may be commenced.



A combination of the foreground and background shown on the opposite page

The foreground is always printed first. The foreground negative is placed in the printing frame, with the foreground portion of the negative touching the remaining blocks of the frame. This will allow the long piece of paper to lie flat in the frame. The foreground end of the frame is closed, and the opaque envelope is slipped over the projecting portion of



WELLS CATHEDRAL--THE CHAIN BRIDGE.

BY F. H. CLIFFE.

the P.O.P. The other flap of the frame is then closed up, taking care to see that the envelope is just held by the flap of the frame and the negative. The whole of the frame is covered up with the opaque cloth with the exception of that portion which is needed for the foreground, and the frame taken into the sunshine.

Sunshine is essential, as the cloth has to be kept moving during the whole time of printing, to prevent the formation of a hard line. At the expiration of the time required for printing, the foreground will be found to be nicely vignettèd, and will appear similar to the reproduced foreground. The blank expanse of P.O.P. is required for the background negative.

The background negative is now substituted for the foreground one, and by means of transmitted light the background is adjusted to the already printed foreground. Then the opaque envelope being slipped over the printed foreground, to prevent it being light struck during printing, the lower portion of the frame is covered with the opaque cloth, and the background vignettèd into the foreground, keeping the cloth moving the whole time during printing.

The worker who has not tried it before will be amazed how perfectly the one negative has vignettèd itself into the other. The process is simplicity itself. All that remains is the usual toning and fixing, which needs no explanation.

Should the joins not be quite to one's liking, the parts may be toned down to match the surroundings, by cutting a small hole in a large piece of black paper, allowing the sun to shine through on the parts required to be darkened. Clouds or hills may be added from other negatives in much the same way, if desired.

A word may be added regarding the method adopted to produce the illustration to this article. The cloth was shaped



A Pomeranian Puppy.

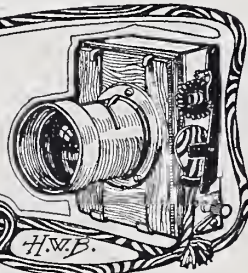
By James Anderson.

in the form of an inverted V during the printing of the foreground, and V-shaped during the combining of the background.

THE DEVELOPMENT OF HIGH SPEED EXPOSURES.

BY ADOLPHE ABRAHAM, B.A.

The fourth of a series of short articles on focal plane photography. The preceding articles of the series appeared in "Photography and Focus" for May 19th and June 9th, 1908.



I REMEMBER that when a beginner at focal plane photography I argued that it would be desirable to shun the good old-fashioned pyro, and turn to the youthful reducing agents which boasted more vigour. My assumption was that the improvement in speed of the dry plate should be accompanied by a corresponding evolution in developers. I have no doubt that all focal plane workers in their novitiate try, one after another, the various developing agents recommended, the best known of which are pyro-metol, metol-hydroquinone, glycin, and eikonogen-hydroquinone.

For the man with limited time and patience, pyro-metol is without doubt the best developer to use; but my chief objections to it are the excessive contrasts produced and the coarseness of the deposit. The developers compounded with hydroquinone are favoured for their cleanness of working, but the "pretty" negatives produced are not good printers.

Personally, I invariably use pyro-soda, which everyone is agreed is unequalled for well-exposed subjects—and even a fast shutter exposure may be quite a full one—whilst for under-exposed work it will, on the whole, give a better result than any other developer I know. The temperature of the developer should not be below 65° Fahr., nor, in the case of nearly all plates, above 70° Fahr. In the winter one's fast shutter work improves enormously if the dark room has been well heated some time before development is begun.

Probably a great deal might be achieved by cooking a badly under-exposed plate to a temperature above 75° Fahr., but fog is very readily produced.

The developer must be diluted; nearly all formulæ advised are in much too concentrated a form. The dilution should be twice or three times the strength usually recommended for normal exposures, but we must remember that it must be so conducted that the necessary minimum of reducing agent is present.

For example, if the developer is so compounded that one grain of pyro is used in each ounce of developer, then three ounces of developer as used for a half-plate will contain three grains of pyro. The developer must therefore be diluted to six ounces, so that the three grains are not decreased. I use these figures arbitrarily, because nobody knows accurately what minimum of pyro is sufficient to effect reduction on a given area of emulsion.

I recommend a solution containing two ounces each of sodium sulphite and sodium carbonate to the pint of water; I never use potassium bromide. I take one ounce of this, two ounces of warm water, and three grains of dry pyro added at the time of development. In extreme cases less pyro is added and rather more soda solution and water. Development takes from a quarter of an hour to an hour.

An extension of dilution is stand development, to which glycin and rodinal are best adapted. Unless one has a dozen negatives to develop, an inconveniently large amount of solution must be used; and I have always found that all sorts of mysterious scratches appear as a result of the vicissitudes to which the plates are subjected. I do not think that better negatives are procurable by greater dilution than three times.

CORRESPONDENCE



The Editor is not responsible for the opinions of his correspondents.

PLATE SPEEDS.

Sir,—Mr. Clifford Nash is wrong in stating that we altered the speed of our actinometer in 1902.

The standard by which we adjust the test to the sensitive paper has never been altered or varied since the introduction of the meter in 1890, although the paper has been improved from time to time. If there was any change of standard it was in the other meter mentioned.

Yours, etc.,

WATKINS METER CO.

Sir,—I have just read Mr. Clifford Nash's letter on the subject of "Comparative Plate Speeds." I was certainly not aware of any such alteration in the Watkins "standard," but had it taken place it is quite possible that, although I am a constant user of the meter, I should never have discovered it, if the speed card had been altered at the same time.

As I endeavoured to point out in the article, the unsatisfactory nature of the methods of testing the speed of plates—unsatisfactory, that is to say, from the point of view of the comparisons of different makers' tests—led me to deprecate any attempt to translate one lot of speeds into another.

I was careful to point out that what one maker calls 100 H. and D. is not necessarily the same as what another maker would designate by the same number. In fact, except amongst the plates of the same makers, the speeds on plate boxes are very frequently distinctly misleading—not of course intentionally. I should strongly advise those of your readers who are at all puzzled by these discrepancies to put on one side all thought of comparing these speed numbers and to select a system and a make of plates. Then, and only then, will they find that the numbers on the boxes will be a satisfactory guide.

I suppose that it is almost too much to hope for any systematic revision of our plate speed methods, or for any central or authoritative statement as to the correct numbers to be placed upon the boxes. My own practice, I might add, is to keep myself up to date with the Watkins speed card, and not to allow supposed discrepancies between this and the numbers stamped on plate boxes to lead me astray.

Yours, etc.,

THE WRITER OF THE ARTICLE.

THE CRACKING OF CARBON TISSUE.

Sir,—With reference to your remarks in the editorial column last week on the cracking of old carbon tissue, I have had similar experience to that of your correspondent, but have discovered that if the tissue has been stored in a dry place, and when required for use placed in a cellar or similar cold recess for about a day, the tissue will have become quite limp, rendering it equally satisfactory to that purchased new.

Trusting you may find space for the above in *Photography and Focus*, which may help my fellow enthusiasts, and wishing your paper every success,

Yours, etc.,

A. THOMAS HALL.

TONING DIFFICULTIES.

Sir,—I was much interested in Mr. Kemsey-Bourne's letter on this topic. The rock upon which so many novices seem to split is that most of the instructions given by the makers are all based on the process of toning quite a number of prints at once. This is as it should be with P.O.P., which is a process of great certainty when the adroitness of the photographer's manipulation allows the toning of upwards of ten prints simultaneously.

But by far the larger number of casual amateurs make, say, two negatives and one print from each. Following the instructions in this case means wasting of much gold, or using the hazardous combined bath. The first few prints will

be excellent, but the bath will gradually lose its strength. My advice to those who want uniformity is to use gaslight or bromide papers, throwing away the small quantity of developer required when done with. If P.O.P. is wished for, it is far more economical to save up one's prints until about ten are ready, and then adopt Mr. Watkins's method, which I follow exactly.

I tone a large number of stereo prints—as many as twenty at a time—making up sufficient quantity as per instructions, and never have the slightest difficulty. The whole bath of toning mixture is thrown away after use, since practically all the gold is used for the prints. I have found that using separate baths produces tones which simply annihilate those got by the combined method.

I have long since discarded the method of toning one or two prints in a small quantity of combined solution, pouring back again into the bottle, since, slowly but surely, the contents become an unknown quantity, and irregular and unsatisfactory tones are eventually inevitable. I advise tyros to follow the Watkins method *slavishly*, as I do.

A very little practice will enable the novice to complete upwards of a dozen quarter-plate prints with a minimum expenditure of gold, and with lovely purple tones. Do not try to tone two prints only, since the waste of material is very great. If it is necessary to take one print, do it on ferro-prussiate paper as a temporary expedient. The colour is not particularly beautiful, but the process is simplicity itself. Finally, save up a batch of P.O.P. prints, mix up toning solution according to instructions, and *tone all at once*.

Yours, etc.,

PHILIP H. WILLIAMS, F.C.A.

PHOTOGRAPHY IN THE MEDITERRANEAN.

Sir,—If I may be of any assistance to your correspondent "Volunteer" (Charlton), I would suggest that he takes with him that make of plates which he is in the habit of using, but they should be the ordinary (slow), and not instantaneous. He should use the smaller stops, viz., f/16 or f/22 for instantaneous work, owing to the intensity of light and clearness of the atmosphere, and by all means use an exposure meter. The addition of a $\times 5$ screen would be very useful to his outfit, and enable him to use a larger stop, say f/11.

Secondly, he should take with him, if developing immediately, a supply of hardening chemicals, as the temperature of the water obtainable, if used without, would strip the film clean from the glass or celluloid. This has been my experience, and I have lost many irreplaceable negatives through lack of this precaution.

Early morning and late afternoon light is very deceptive, and I should not advise anyone to expose plates at these times if it can be avoided. The best hours are: From May to October, from about 10 a.m. to 5.30 or 6 p.m.; and during winter months from 11 a.m. to 3.30 p.m. (local time).

Yours, etc.,

W. JOSTY.

THE ALUM BATH FOR P.O.P.

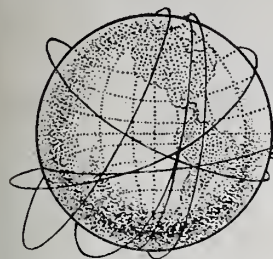
Sir,—With reference to the letter from Mr. A. D. Ballard in your issue for June 30th (page 157), recommending an alum bath as a preventive of prints adhering to the glass or plate in the process of glazing, I have noticed one decided disadvantage.

There is a distinct alteration in the depth of the toned picture, the print losing colour and becoming lighter. This process then limits the use of an alum bath, which is then only serviceable in the case of pictures—which have been too deeply printed. Can that be remedied?

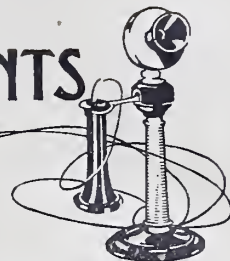
Though it may seem a minor detail, the process of glazing is really the most important of all, inasmuch as an excellent picture may be spoiled or a good one made better.

Yours, etc.,

H. BURT.



REPLIES TO CORRESPONDENTS



REGULATIONS.—(1) Envelopes must be marked "Query," and the "Enquiry Coupon" found elsewhere must be enclosed. (2) The full name and address in addition to a *nom-de-plume* must be given. (3) Only one question on one subject is allowed in each letter. (4) Prints may be sent

for criticism, but a separate coupon must be sent with each print, and a stamped addressed envelope (not loose stamps) for their return. Queries are dealt with in strict rotation in the order received. Only "Urgent Apparatus" queries will be dealt with by post, for which purpose a stamped envelope must be enclosed.

THE WEEK'S QUERY.

YELLOWING OF P.O.P. PRINTS.

I have a large number of P.O.P. prints, taken in India and South Africa, and although professional ones, many are turning yellow, having the appearance of under-fixed "combined toning and fixing" method. I should be glad if you could tell me how I can save them. As many are very valuable, I do not care to experiment with them.—R. B. A. ELLIS.

There is a certain risk about any method which involves wetting prints of unknown origin; and as far as the valuable ones are concerned, the best course to pursue, beyond a doubt, would be to rephotograph them, and make permanent prints from the negatives so obtained. A yellowed print will often give a very much brighter and stronger picture when treated in this way than might be anticipated.

If it is determined to try and restore them, then they had best be placed in a fresh hypo bath of three ounces to the pint for a quarter of an hour, and then be rinsed in three or four changes and placed in a combined toning and fixing bath, until they are sufficiently brightened up. Those which have not yet faded away may be given the hypo treatment by itself, followed by the washing. It will at least increase their chance of permanence, although at best it is a very imperfect remedy for a proper treatment at first.

REPLIES IN BRIEF.

STAIN (Notting Hill).—Alas! There is no remedy whatever. **MISS A. ELLIS** (Exeter).—We are sorry we cannot use the photograph.

CONFUSED (Watford).—We are referring the matter to the author.

VISPEY (Colne).—We are sorry to say we have no information at present.

J. W. FIRTH (Harborne).—We have referred the matter to our contributor.

HERBERT (Fulham Road).—We have an article in type on the very subject.

A. F. DOWNEY (Blackheath).—Application should be made to "the manager."

W. VAUGHAN (Stonehouse).—Print and criticism will be sent on receipt of a stamped envelope.

CARLOS (Toronto).—Certificates will be posted this week. We anticipate repeating the competition.

EDIE (Birmingham).—We know of no satisfactory way of getting green tones on self-toning papers.

DENSTONE (Manchester).—See reply to J. Morley. We can find no trace of an editorial article on the subject.

WINDOW (Bradford).—A light wooden frame should be made to fit into the window, and be held in position by turn-buttons. Over it should be stretched builders' canvas, or other fabric, but the canvas is best, and then two layers of brown paper should be pasted down on the canvas.

C.M.R. (Enniskillen).—A little more exposure and a little less development would have given a better result. As it is, the whites are too blank, and the shadows so dark that much of the orthochromatic rendering that you should have got has been lost.

J. WODEHOUSE (Cyprus).—Either No. 1 or No. 5 with the Koilos shutter will do what you want, and can be recommended. You will sometimes find that a 6 in. lens on a quarter-plate will prevent you getting what you want, but it is what we should prefer.

B.W.E.L. (Mayfair) asks for information about the Shetland Isles, and if a guide to them is published. We have enquired from the principal guide book publishers but cannot hear of one, nor have we a correspondent there. Perhaps some reader can help.

H. P. ARMSON (Rushden).—It is best to have the photographs a little larger than the blocks are to be, purple toned P.O.P. being the prints which the blockmaker usually prefers. Half-plate is a convenient size if the blocks are to be quarter-plate or thereabouts.

H. R. HATHRETT (Dartford).—We cannot give you what you ask, as it varies with the temperature and with the plate. In our own case we use the plate makers' formula, diluting with its own bulk of water and ascertain the time by a preliminary test, and if you want to make up your own developer, you will have to do the same.

SUNBEAM (Muswell Hill).—We have no information at present; and know nothing more about the picture than its title.

P.O.P. (Lower Edmonton).—The method referred to is certainly not as effective, and at times, in spite of it, the trouble becomes very great.

W.J.J. (New Southgate).—There is nothing to be done but to renew the material. Very thin chamois leather is the best thing for the purpose.

GORDON (Hythe).—The exposure must be increased, usually about four times; but it would be well to get the exact figures from the makers.

J. ARDAGH (Dublin).—No permit is necessary for exteriors. For interiors there is a fee (5s. a day, we believe); application should be made to the Dean.

G. T. GREEVIN (Kendal).—We should refer to the makers, our own experiences have not been sufficiently extensive to enable us to answer your question.

W.J.S. (Dalston).—The stops are f/8, f/11, f/16, f/22, f/32, and f/45. The London agents are Messrs. Seabrook Bros. and Co., 32 and 33, Featherstone Street, London, E.C.

T. P. COURTNEY (Wynwood Road, Clapham).—We posted an answer to your letter, but it has been returned marked "Not Known." We have no report about Scarborough.

J. CRAIGE ALLEN (Chatham).—The address of "The Field" is Windsor House, Breems Buildings, Chancery Lane, W.C. The rest of the enquiry is hardly sufficiently photographic.

J. J. GIBBONS (Toronto).—"Colour Photography," by Bolas, Tallent, and Senior, published by Marion and Co., Soho Square, London, W., price 5s. nett, will give you what you want.

NARA (Idle).—We should call the copies very fair ones, except that they are by no means sharply focussed. Either you did not get them sharp to start with, or the focus has shifted afterwards.

C. E. FOWKE (Stafford).—The Rotary Photographic Co., Ltd., Moorfields, London, E.C., supply silk sensitised with a bromide emulsion like bromide paper. Print-out fabrics must be made by the user on the lines laid down in the article.

W. H. HAWKINS (Stratford).—The mountant is not one we should recommend; but it is much more likely to be due to insufficient fixing and washing. If you use a home-made mountant, freshly made starch is the only paste which may be regarded as "safe."

DUM SPIRO SPERO (Stockport).—It would be best to dilute it with a two per cent. solution of sodium sulphite. You would then find that it would take about half an hour; but it would be best to make a trial to be quite sure. There is no necessity to remove the backing.

J. M. MUSSEN (Rathmines).—We should not advise the use of metal at all for such a purpose, as it would be affected by the solutions used. Lead might answer, but this, we imagine, would be unsuitable on other grounds. Asphaltum varnish (Brunswick Black) is as good a protection as anything.

DRY FLY (Southwold).—You do not say wherein you have failed. The method is one of the best, but needs practice to make perfect. We have asked our publishers to do what they can. Many thanks for your good wishes; the same to you. N.B.—No stamps accompanied your letter.

WARD HUME (Harthill).—The time varies with the make of plate, which you do not give, and with the temperature, and your only plan will be to find out by trial. A plate that has been overexposed should be developed for precisely the same time as one that has been correctly exposed.

A. W. BROWN (Manchester).—We are very glad to hear of your success with the theatre photography. As far as sunsets on Autochrome plates are concerned, we should advise you to give a hundred times the exposure you would give to a fast plate without a screen on the same subject.

LELA PUHLA (Hoylake).—We cannot say where you went astray, as several things might have brought it about. We think you would do well to stick to glossy surfaces at least at first. The image should have been distinctly visible before starting to ink up, and we therefore suspect that the print was not properly washed free from hypo.

BILLY (Brockley).—Baskett's Globe Polish reducer is made by mixing

Terebene	...	...	...	...	...	...	2 ounces
Salad oil	...	...	...	...	...	...	2 ounces
Globe polish	...	...	...	...	...	...	1 2d. tin

The mixture is well stirred up, and strained through two or three thicknesses of fine cambric.

Book Illustration by Photography.

UNDER the above title Mr. Arthur Marshall, A.R.I.B.A., contributes an interesting article to the June number of "The Bibliophile." He points out that reproductions from photographs play an important, an overwhelming part, in the illustration of large numbers of periodicals.

It would be safe to add that the quality of this kind of illustration is steadily rising to a very high level. Banished for ever is the idea that the photographer cannot produce results that are absolutely satisfactory from the highest artistic view point. One of Mr. Marshall's own illustrations, "A Venetian Pearl," is full of a delicacy and charm that any painter might be proud to produce.

Of course in this question of photographic illustration we may, for the present at least, leave out of consideration effects due to colour. In the great majority of cases a photograph is reproduced in monochrome, with the addition at times of a "tint" printed over the whole. Mr. Marshall observes that if a number of exhibits from the walls of the Royal Academy and of the Royal Photographic Society were reproduced by the ordinary half-tone process it is more than probable that the photographs would score in comparison with the paintings. The reason is not far to seek. The experienced photographer, at any rate, knows that he must obtain his effects without relying at all on those colour contrasts and harmonies that are the mainstay of the painter's efforts.

It must be admitted that there are certain types of illustration that will probably remain for ever outside the range of the photographer's art. The most skilful handler of a camera, with all possible resources in the way of scenery and accessories, could not illustrate "Alice in Wonderland" as did John Tenniel, or "Cranford" as did Hugh Thompson. Some of Meissonier's figure studies, when reduced to monochrome, bear a suggestion of posing, and look as though they might be successfully imitated in the studio; but the probability is that the result would be artificial and unconvincing to a degree. And if photographers cannot succeed in such a comparatively simple case it is obviously hopeless for them to aspire to pictures showing vivid movement and incident with powerful effect.

But it is not so much what the photographer cannot achieve that most concerns us, but rather what lies well within his reach. In landscape, in architecture, in the play of light and shade and the rendering of cloud and mist and water, in portraiture, in a thousand and one subjects around us, the ready camera is a wonderfully effective instrument, and leaves the lagging pencil and the laborious brush far behind.

Mr. Marshall, in his article, wisely draws attention to the important fact that the photographer now has many printing processes at his service, and that their different characteristics will greatly aid him in securing the results he desires. It was considered at one time a *sine qua non* that a good block could only be made from a smooth silver print. But those were the days when the success of a photograph was measured solely by the amount of sharpness of its detail. The very suppression and softening admired in a drawing were anathema in a photograph. We are beginning to know better. When detail is required photography will render it with a perfection beyond the skill of any draughtsman, but we do not now deride a photograph that presents broad masses and soft outlines. One of the very best of our illustrated papers relies to a great extent upon photographers for its pictorial matter, and a study of the result is most gratifying to all lovers of the art. On one page we may find an interior with a wealth of delicate detail that would be the despair of the draughtsman, and on the next a landscape with all the grace of a Corot. Yet both are the work of the photographer.

In short, the photographer has attained a secure foothold as a caterer for the supply of good and varied illustrations. Many of the restrictions that once hampered him have been swept away. His hands are now more free and more skilful. For the ordinary every-day record of passing events the mere

photograph, often terribly lacking in even the elements of good work, may still be endured for a time. But in the future better and yet better things will be expected of the photographer. His work must be measured according to the highest standard of excellence and good taste. Even in the every-day photograph of merely passing interest crude vulgarity will not be tolerated for ever.

The photographer who aspires to qualify as a capable illustrator may lay to heart a practical lesson from these remarks. It is evident that as a prelude to success he must acquaint himself thoroughly with all the means at his disposal. The ability to produce a straightforward rendering of a subject will not be sufficient. He must study arrangement, selection, lighting, and other conditions; and above all he must master



NARCISSI.

By G. H. BETTISON.

Honourable Mention "Focus" Postcard Competition.

those methods by which he can bend his results more toward his own desires. An oil pigment print may be worthy of reproduction when a silver print would be commonplace. It is also essential to bear in mind the end in view, namely, to give the desired effect in the ultimate reproduction. Methods that may be effective in an original print may be fatal to the success of a reproduction. On the other hand work may be put into a print which, while obvious and offensive in the original, will be harmonious and valuable in the reproduction.

Those photographers who produce book illustrations and those who contemplate doing so should alike make a point of reading Mr. Arthur Marshall's article and study the examples of pictorial work which point his morals and adorn his tale.

What Title Do You Suggest for this ?



This print which Mr. Wastell, who made it, entitled, "Herself the fairest flower of them all," is the subject of the Title Competition, which closes July 31st. Rules will be found on page 213, and the coupon on page viii., this week. Cash prizes.

REVIEWS

Griffin's Medio-Anastigmat Lens and Koilos Shutter.

LENSES make their appearance nowadays in such rapid succession that it becomes increasingly difficult to keep count of them. Each new one as it comes before photographers is heralded as something far superior to its predecessors, and sometimes proves to be a

real advance, but more often to be merely another way of getting a similar result. It is quite refreshing, therefore, to meet with a lens for which no such extravagant claims are made, and such a lens we have in the "Medio-Anastigmat" of Messrs. Griffin.

The word "Anastigmat" in its title is like the word "Platino" in the name of a bromide paper, and is qualified by the term "medio." The lens is not put forward as an anastigmat, but is very frankly described in Messrs. Griffin's latest catalogue as having been "constructed from a new formula with the object of producing results as near those obtained with the



real anastigmat lens as is possible without the excessive cost of the latter." We have recently had one of these instruments, mounted in a Koilos shutter, on a camera under test, and found that it came through the severe trial to which we put it with remarkable success. The lens is made in two sizes of $5\frac{1}{2}$ in. and $6\frac{1}{2}$ in. focus, intended for use on a quarter and on a half-plate respectively. The lens we had was the No. 1 quarter-plate instrument. It worked at $f/7.7$, at which aperture it covered the quarter-plate excellently, giving good central definition, and allowing the rising front to be freely used. By stopping down it would be possible to use the lens as a wide-angle instrument on a larger plate. No distortion of straight lines was perceptible, and the image was a very clear and brilliant one.

The Koilos shutter in which this lens was mounted is familiar to our readers. It is a diaphragm shutter, capable of giving "bulb," time, and instantaneous exposures, and for the last is graduated from one second down to as brief an exposure as $\frac{1}{300}$ th of a second.

The price, as has already been pointed out, is a feature of this instrument, lens, and shutter, being supplied at £2 7s. 6d. for the quarter-plate, and £3 3s. for the half-plate size. The back lens can be used by itself when a longer focus instrument is wanted, and either in this form or in that of the complete lens the instrument will be found a very serviceable tool.

The White Band Chemical Co.'s "Pakols."

SINCE we last had the opportunity of reviewing the "Pakol" chemicals some three years ago the list of these handy products has been greatly lengthened.

It now includes pyro-soda, pyro-metol, hydrokinone, amidol, and metol-hydrokinone amongst developers, together with a special developer for negatives on celluloid film, known as filmol. There are also a reducer, a gold toning and fixing preparation, a platinum toner, and an intensifier in "Pakol" form.

And what is a "Pakol"? some reader may ask. For the enlightenment of those who have not used one, we would point out that "Pakol" is the trade name for a preparation of photographic chemicals ready for immediate use. The chemicals are done up in little packets, each one being wrapped closely in tinfoil, and put up in a little cardboard case, which can instantly be opened by pulling a tab. The contents are thus adequately protected from the air, without the necessity either for glass tubes or bottles. The makers are the White

Band Chemical Co., of Progress Works, South Croydon, and the prices of the Pakols are so low as to make them a very economical form of chemical for those who do not wish to be bothered more than they can help with weighing and measuring.

We have recently been using some of these products, and found them very satisfactory in every way. The "B.B. Intensifier" for example, which sells at 4d. per Pakol, makes intensification very easy and straightforward. All that has to be done is to make up two solutions each of five ounces with the two ingredients contained in the Pakol. The negative is then placed in one of these solutions until it is bleached right through, and is then rinsed and transferred to the other. This at once blackens it, and in so doing greatly increases the contrast. Hence the term "B.B.," i.e., "bleach and blacken."

We are very pleased to be able to recommend the "Pakols" without reserve.

The Autotype Company's Special Paper for Oil Printing.

ALTHOUGH the oil process is not likely ever to be more than the printing method of quite the advanced amateur, there is no lack of effort on the part of our big manufacturers to cater for those who wish to work it. Many of the most successful oil prints that have been produced have had as their basis one or other of the transfer papers made by the Autotype Co. for the carbon process. Now that firm has put upon the market two varieties of paper specially prepared for oil printing. In the experiments necessary to make these, the company points out that it has had the assistance of well-known British and

French workers of the process, who have pronounced very favourably on the new material.

The new papers are of two varieties—one white and one cream-toned—known respectively as No. 1 and No. 2, the textures of both being matt. Both seem to be very suitable for the process, and, in the hands of more than one member of our staff, answered very well, the most noticeable characteristic being the comparative ease with which they could be pigmented. They are supplied in packets of one dozen pieces at 8d. for $5\frac{1}{2} \times 4\frac{1}{2}$ size, 10d. for 7×5 , 1s. 6d. for 9×7 , 3s. 6d. for $12\frac{1}{2} \times 10\frac{1}{2}$, and 5s. for $15\frac{1}{2} \times 12\frac{1}{2}$.

The Empire Folding Hand Camera.

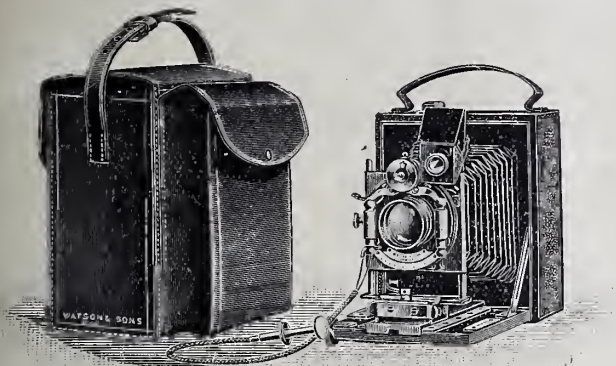
IN sending us for examination one of the new hand cameras, known as the Empire, which they are putting on the market, its makers, Messrs. W. Watson and Sons, Ltd., of 313, High Holborn, London, W.C., inform us that it had its origin in a special design which they got out for the Indian market.

The climatic conditions in India, its extreme heat and at times excessive moisture, are very injurious to apparatus that has only been made with an eye to more temperate con-

ditions; and many of the cheap forms of camera which will do well enough in the United Kingdom are soon useless when transferred to the Indian peninsula. Accordingly, Messrs. Watson set to work to get out a camera on the recognised lines as far as design went, but specially to meet such a case, and now are offering the camera to British buyers also. The illustration which we print upon the next page serves to show its general arrangement.

The Empire camera is made throughout of well-seasoned

materials, and is well finished. The front is drawn out along the baseboard, and clamped at the infinity mark, and can then be focussed for other distances with the rack and



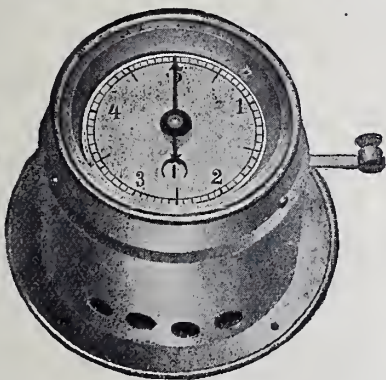
pinion in the usual way. Double extension is provided, so that half the complete lens may be used when occasion requires. The front has both rising, falling, and cross front movements, marks are given so that the photographer can tell at once whether his lens is central, and a simple but most efficient clamp locks the front in the desired position. The rise is a very considerable one. The front carries a reversible finder, and the shutter is of the well-known Bausch and Lomb pattern. The back is not reversible, but two bushes for the tripod screw are fitted, so that should occasion arise when the camera is wanted on a stand it may be fixed either in the vertical or horizontal position. Two levels are provided.

The focussing screen is carried in a removable frame, and is fitted with a hood so that a focussing cloth is not essential, and each camera as sold has three double dark slides.

The price of the Empire camera complete, with an R.R. lens of Messrs. Watson's own make (quarter-plate size), is £8 10s., or fitted with the Series I., Holostigmat, working at f.6, and convertible, providing lenses of three foci, 5½in., 8½in., and 10½in. respectively, focussing scales for each of these being provided, £12 12s. In each case the prices include a light leather case and orthochromatic screen.

The Ensign Time Clock for Autochrome Plates.

TIME development with Autochrome plates was, when they first came out, a necessity, and although since then Messrs. Lumière have shown that it is possible to use a dark room lamp to note the progress of development, we expect that a good many photographers will prefer to stick to the time method pure and simple. Certainly where the exposure can be determined with a reasonable amount of accuracy it seems to leave little to be desired.



Such workers will find the Ensign Time Clock, illustrated herewith, a convenient little piece of apparatus. The lever at the side is pressed down as far as it will go, the operation causing the hand to spin round in a complete circle. This both winds the clock and starts it running, so that it is not done until the commencement of the period when it is to be timed, when it does not take a moment.

The hand then starts to travel round the dial, performing the complete circuit in five minutes. At the end of two and a half minutes—the time taken for the complete development of an Autochrome plate with the original formula—the bell rings, and when the complete five minutes have elapsed, it rings again and the clock stops.

The Ensign Time Clock is made by Messrs. Houghtons, Ltd., of 88 and 89, High Holborn, London, W.C., and sells at 8s. 6d. It is made to screw on the dark room wall, where it takes up no room at all, is out of the way, and yet at hand ready for instant use.

It is a little piece of apparatus which will appeal to many Autochrome workers, we feel sure.

The Increased Exposure with a Colour Screen.

WHEN a colour screen is used with orthochromatic plates, in order to get a more faithful rendering of the colours of the subject, the exposure is increased to an extent which depends not only on the screen itself, but on the plate, and to some extent on the light at the time. To use such a screen to the best advantage, therefore, the photographer should know how to ascertain what increase his screen demands with the particular brand of plate that he is using. Mr. Chute, in "Camera Craft" recently, gives the following method of learning this:

A dark slide is loaded with the kind of plates that is to be used, the camera is set up before such a subject as is most generally photographed, focussed, a fairly small stop being used, the lens is capped, and the dark slide inserted. Supposing the subject to be one requiring four seconds with the stop used, the shutter is drawn out of the slide and the lens uncapped for one-fourth the estimated correct exposure; that is to say, in this case, for one second. Then the slide is pushed in a little distance and another exposure of like duration given; pushed in a little more and a third exposure is made twice as long, or two seconds. The slide is again pushed in, and so on, each time doubling the last exposure, until it is completely home. The plate will then have been exposed in strips, having in succession exposures of one, two, four, eight, sixteen, and thirty-two seconds or more respectively. The same is then done with the other plate, but with the colour screen in position and starting with an original

exposure about four times as long as that given in the case of the first plate. This will give a series of strips having respectively four, eight, sixteen, and so on, seconds.

The two plates are marked so that they may subsequently be distinguished, and are developed together for the same length of time. It will be found that two or three strips on one of the plates are about right, and that they correspond very closely to a like number upon the other. Supposing that the sixteen seconds exposure strip on the first plate corresponds with the 128 seconds exposure strip made with the screen in position. Then one has but to divide the latter figure by the former (128 ÷ 16) to find that the screen with which the second exposures were made is an eight-times one.

It must be remembered, however, that while this particular screen may increase the exposure eight times in the case of this particular subject, another greater or smaller increase may be required by the same plate used under different conditions. The light is often very distinctly yellow, particularly near sunset at certain seasons of the year, and the subject itself may contain some particular colour in a predominating amount. In the former case the increase of exposure necessitated by the screen will be less than under ordinary conditions. Where the subject contains a preponderance of blue, a colour that makes a short exposure sufficient, the employment of a screen cutting out the too active blue will increase the exposure necessary much more than would be the case were yellow or red the predominating colour.

LADIES AND PHOTOGRAPHY.

By a Mere Man.

Certain mistakes which the feminine photographer is prone to make: and their remedy.

(Concluded from page 185.)



HE same sensitiveness and control of the fingertips which makes a woman good at knitting and at threading black film papers makes her also good at the task of loading plates into their slides in total darkness. A skilled knitter does not need to use her eyes when knitting; but a man uses his eyes for

practically every job he works at. Thus the loading of plates in total darkness (a very valuable accomplishment) comes harder to him than to a woman. Nevertheless even here a man usually gets on better than a woman, at first.

A woman rarely, in my experience, has enough of what I call "respect" for the sensitive emulsion of a plate or film or printing paper. It takes her a long time to grasp its extraordinary sensitiveness, not only to light, but to other actions, such as the touch of a finger or the deposit of dust. When a woman takes the packet of plates out of their box in total darkness she will quite calmly feel the film side, to make sure that it is the film side, and in so doing, however "clean" her hands are, she will be very apt to make a mark which will subsequently show on the negative. A man, contrariwise, puts full trust in the plate maker. He knows that plates are always packed face to face in their box, and if he does distrust this, and wants to make sure which is the film side, he feels not the film, but the glass, and does no harm. Even if he does touch the film, he does so only at its very edge, and with excessive tenderness. A woman touches the film far too firmly, and not at the edge, where the mark of the touch would not matter.

Am I too hard on women photographers? Perhaps the above remarks give that impression; but I assure you that they are the outcome of real experience. I repeat that women rarely, if ever, have any "respect" for the emulsion—at the beginning of their photographic careers, I mean. This failing appears not only when they are dealing with negatives—though I am afraid that I must add that my lady pupils far more frequently scratch their negatives and make holes in the film than my men pupils—but also in making prints.

In P.O.P. printing a woman is slower than a man to learn the need for never touching the face of the print, for fear of making stains or markings. A woman is too confident that her hands are clean. Perhaps they are, but even when clean

only the lightest touch of the gelatine emulsion is permissible. Anything like a *press* will make a mark.

Platinotype printing—the process which for its beauty and refinement should appeal most to women—is another case in point. I have tried for days on end to teach a lady to make platinotype prints, and again and again the print has developed up with the white marks which betoken that either in loading the printing frame or in unloading it the face of the sensitive surface has been fingered. My pupil has

protested that she *didn't* touch it so much as with a fingernail, and has assured me that there was something wrong with the paper to cause the flaws; and again and again I have proved her wrong by making a perfect print out of the very batch she condemned. Knowing as I do the wonderful sensitiveness of platinotype, my every movement in handling it is, automatically, cautious and respectful; and though I am "all thumbs" by nature, and my pupil is a person who can play the piano and knit and do a hundred other dainty things of the same sort (none of which demand "chemical cleanliness" of the hands!), she is only now, after tremendous wasting of the platinotype, learning to make flawless pictures. And I know one professional photographer, most of whose printing is done by his wife, who nevertheless never allows her to this day to touch the platinotype orders! A few spoilt silver prints don't worry him, but spoilt platinotypes come expensive.

I spoke in the previous paragraph about "chemical cleanliness." This I have found to be another detail of photography which is more difficult to impress on my feminine pupils than on my masculine. Most men, nowadays, have had a smattering of chemical training at school, or else as boys have possessed an experimental chemi-

cal cabinet, with which to make what they picturesquely call "stinks." Thus they don't approach the chemistry of photography with absolutely uneducated minds. It is true that no knowledge of the chemistry of photography is needed to take photographs. It is simply a case of "following the instructions." But chemical cleanliness is needed if a knowledge of chemistry is not—at any rate, a cleanliness far greater than that ordinarily practised in everyday life.

The developing and other dishes which are used *must* be washed carefully between use, and so must the measure glasses. Now, a woman, though accustomed, perhaps, to the



VERONIQUE.

Awarded Second Prize in the Beginners' Competition for May.

BY ETHEL W. AMBLER.

unsavoury task of "washing up" tea things and dinner plates, is also accustomed to refrain from washing them up until such time as is convenient to her. Food does not stain the dishes on which it has lain; and a mere rinse and polish with a dish-cloth will make them clean to the feminine eye, and, indeed, clean for all practical purposes. It may sound rather nasty to say so, but the amount of cleanliness which a woman thinks sufficient for the plate off which she is to eat is probably not by any means sufficient for the dish in which she is going to develop a photograph, if that dish has meanwhile had, say, fixing solution in it.

Moreover, a dish which has been used for photography should be cleaned *at once*, not laid aside till "convenient." Photographic chemicals stain dishes, and even in some cases eat their way into the substance of the dish, unless washed out at once with plenty of water, preferably warm. Hypo, for example, will eat its way even into porcelain, if left lying in a porcelain dish; and xylonite dishes will stain with almost any photographic chemical, if neglected. Further, to wipe a number of photographic dishes one after the other with one dish-cloth, as one would wipe tea things, will not do. The dishes should not be wiped at all; they should be stood aside to drain, without wiping. The cloth with which we wipe one dish may convey serious impurities to the next one, and even if it does not do so it will be very likely to deposit threads, or fluff, or dust of some kind, which may do harm. The same remarks apply to measure glasses, which must be kept scrupulously clean. When not in use, they should stand either upside down on their shelf, thus catching no dust in their interiors, or else full of water, the latter being preferable. One will find that almost every man who has had any chemistry lessons in school keeps his measure glasses always standing full of clean water; but lady photographers rarely do. They are accustomed to wash cups in the course of their household duties, and then stand the cups in their cupboard mouth upward, so that they catch all the dust that happens to fall.

The same mistake is made with dishes. The housemaid always puts dishes on her shelves right way up—that is, mouth up—and, of course, they catch the dust. This does not matter if the dish is merely to be eaten off! But if it is to have a delicate chemical operation carried out in it, this matters very much. The photographic dishes, after they have been washed, should be leant against the wall of the shelf to drain, face inwards—that is, with their mouths pointing downward—and however much dust falls on their bottoms, no harm is done; little or no dust gets *into* them.

The housekeeper's idea of the operation known as "dusting" is also very different from the photographer's. The rough flicking with a cloth which constitutes the dusting of a room will not do for dusting, say, the interior of a camera or of dark slides. To begin with, the photographer's aim is not

so much to remove dust as, first of all, to prevent the dust from gathering. His camera, when out of use, is always kept shut, and also wrapped in its focussing cloth or in its bag. The slides also are never left lying open. Prevention is better than cure, and if dust can be prevented from entering the camera, then all the better; but when it does enter a wipe out with a cloth is insufficient to do more than stir it up, as does the housemaid's "dusting" in the drawing room.

The camera must be wiped with a soft brush (the "plate-dusting brushes" sold at all dealers' shops are suitable for the purpose), and every corner of the mechanism or the bellows gone over with the utmost minuteness. Given that the camera is kept properly wrapped up most of the time, this dusting need not be very frequent, but when it is done it must



By Miss I. E. How.

be done properly. But the brush must not be kept lying about loose. It must be kept in between times wrapped in tissue paper and in a box, otherwise it will deposit on the plate more dust specks than it takes off it.

Photography for ladies is just the same as photography for men; let me conclude these notes by reiterating that truism. And if any mere males who happen to read this article are tempted to congratulate themselves, conceitedly, on being omitted from my scoldings, may I give them one word of warning? It is this. I have written some hundreds of articles on men's mistakes, and *only this one* on the mistakes of ladies!

An Ozobrome Booklet.

OZOBROME is steadily growing in favour, and we note the publication of a book on the subject, in French, from the pen of M. E. Coustet. The book, which forms one of the series issued by our contemporary, the "Photo-Revue," is clear and to the point. It gives an historical sketch of catalytic processes generally—which Mr. Manly would say have nothing to do with ozobrome—and follows this up by detailed working instructions for both transferred and not-transferred ozobromes, gum-ozobrome, and ozobrome and the oil process.

The book is published by Ch. Mendel, of 118, Rue d'Assas, Paris, price 60 c. in paper covers.



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ADVERTISEMENTS.—All communications on advertisement matters should be addressed—The Advertisement Manager, PHOTOGRAPHY AND FOCUS, 20, Tudor Street, London, E.C. All copy for displayed advertisements for the issue of any particular week must reach Tudor Street by the first post on Monday morning in the week previous.

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BOX NUMBERS.—For the convenience of advertisers, letters may be addressed to numbers at the office of the paper. When this is desired, 2d. will be charged for registration, and three stamped and addressed envelopes must be sent for forwarding replies. Only the number will appear in the advertisement. Replies should be addressed, "No. 000, c/o PHOTOGRAPHY AND FOCUS, 20, Tudor Street, London, E.C."

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ADDRESS.—All communications for the Editor should be addressed: The Editor, PHOTOGRAPHY AND FOCUS, 20, Tudor Street, London, E.C.

TO CONTRIBUTORS.—The Editor will be glad to consider original up-to-date manuscripts on photographic subjects. All contributions must be typewritten, or in very legible handwriting, on one side of the paper only, and should bear the name and address of the sender. Letters or communications arising out of matters already appearing in the paper are not paid for. The Editor disclaims legal responsibility for the safety of matter submitted to him, but he will endeavour to return rejected manuscripts, etc., when a stamped addressed envelope is enclosed for that purpose. No notice whatever can be paid to communications without the name and address of the sender, not necessarily for publication.

PRINTS FOR CRITICISM.—Readers sending prints for criticism or advice are notified that in all cases it is understood that by so doing permission is given for their reproduction, without fee, in PHOTOGRAPHY AND FOCUS.

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PAYMENTS.—Articles and illustrations are paid for on acceptance.

INTERVIEWS.—The Editor will be at 20, Tudor Street, on Wednesdays, between the hours of 9.30 and 11.30 a.m., but can only be seen at other times by appointment.



J. H. DALLMEYER, LTD. Mr. W. A. Lindsay, K.C., a relative of the Earl of Crawford, K.T., F.R.S., former chairman of the company, has joined the board.

× × × ×
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THE GOLDONA HANDY MANUAL is the title of a little booklet issued by Messrs. J. J. Griffin and Sons, Ltd., of Kingsway, London, W.C., and dealing with the use of Goldona, their self-toning paper. It will be sent free to any reader of *Photography and Focus* who sends a postcard asking for it.

× × × ×
THE POSTAL SALON, honorary secretary Mr. R. Stockdale, 13, Mount Preston, Leeds, has a few vacancies for fairly good workers. The annual subscription is 2s., and "applicants for membership should submit two or three examples of their work, though the test is not a difficult one."

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IT IS STRANGE how the best subjects always appear on Sundays, writes Mr. Sutcliffe in the "Yorkshire Post." The day for worshipping the sun was evidently not chosen haphazard by the old heathens.

× × × ×
THE MOTOR 'BUS AND THE KODAK SHOP. A motor 'bus becoming uncontrollable crashed into the front of the Kodak Co.'s Regent Street establishment on the 1st inst., doing considerable damage to the masonry and glass.

× × × ×
APPARATUS AND MATERIALS for photographic buttons and midget photographs is the subject of a special price list, just issued, which will be sent free to any reader on application to Jonathan Fallowfield, 146, Charing Cross Road, London, W.

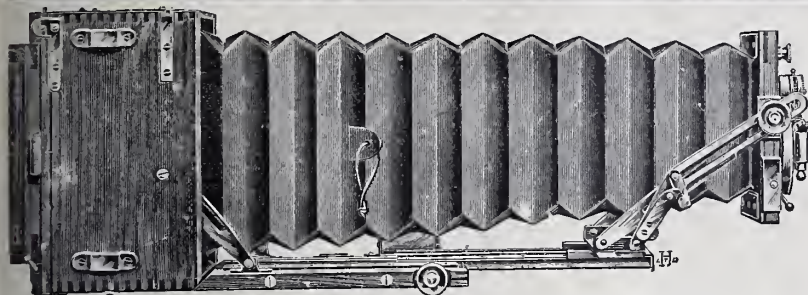
× × × ×
EAST COAST HOLIDAYS is a daintily illustrated booklet issued free of charge by the Great Eastern Railway Company. It gives prominence to some of the less well-known districts in East Anglia, and to the country between the Norfolk Broads and the north coast of Norfolk.

× × × ×
SPIERS AND POND'S STORES, Queen Victoria Street, London, E.C., have just issued a list of bargains in cameras, photographic apparatus, and materials generally in connection with their summer sale. It will be sent free on application. Many of the items are marked at less than half the usual list prices.

× × × ×
THE UNIVERSAL POSTAL PHOTOGRAPHY CLUB. Mr. F. Gardner, of 110, Skinnerthorpe Road, Sheffield, asks us to announce that he is now the secretary. The club has been reorganised, and he would be glad if all its members would communicate with him. Full particulars of the club will be sent to anyone interested, on application.

× × × ×
THE LANCASHIRE PHOTOGRAPHIC EXHIBITION which has just closed was held under the auspices of the Photographic Section of the Preston Scientific Society, in the Harris Free Library and Museum, by permission of the Town Council of Preston. In Class A awards were taken by L. J. Steele, J. M. Whitehead, and A. Bonussi, while H. Ainslie Cox, S. H. Williams, and J. M. Whitehead received honourable mention. The awards in Class B were taken by Easton Lee and Oscar Hardee, while A. J. Holmes and Mr. and Mrs. Bracewell received honourable mention. In Class C, A. Bonussi and S. L. Coulthurst took awards, and W. A. McLean and J. W. Johnson honourable mention. In Class D, G. A. Booth received an award, and A. Taylor and J. M. Whitehead honourable mention. In Class E, A. W. Wilburn and H. J. Ccmley received awards, and H. G. Drake Brockman and E. W. G. Burder honourable mention. In Class F awards were taken by F. A. Tinker and G. A. Booth, and honourable mention by A. J. Thistleton and G. A. Booth. The catalogue was a handsome, well-illustrated production.

There are Six Models of the "Sanderson."



This is a model of the celebrated "Sanderson" Camera, which is constructed of selected Teak, a wood recognised for its great damp and heat resisting qualities. The outside woodwork is polished instead of being leather covered, for leather covering is sometimes liable to rot and peel when exposed to a damp atmosphere. The cameras are brass bound in all vital parts, and the bellows are specially attached with brass plates to the body of the camera. The "Tropical Sanderson" can be confidently recommended for export to India and the Colonies. It is essentially the traveller's camera, for nothing is sacrificed to appearance, and every practical point has been considered.

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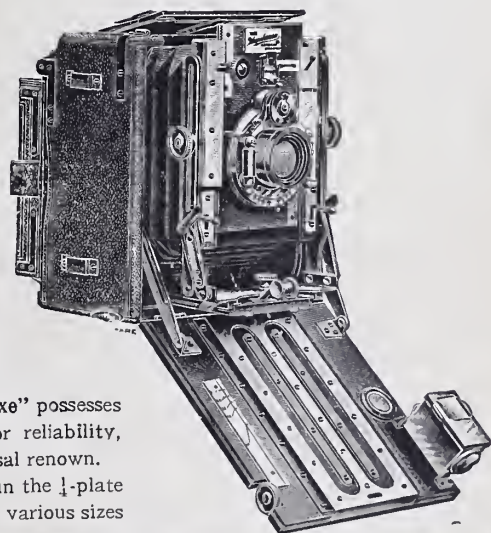
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This wonderfully perfect model, the "Sanderson de Luxe," has been introduced for those who require an instrument of the most perfect finish and quality of workmanship it is possible to produce. The Body is different to the regular model. There is a new Back Focussing Rack and Pinion for wide-angle work, a Rack and Pinion Rising and Falling Front, a closed-in Focussing Chamber, and a Patent Stop Plate.

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Awards in Competitions.

THE TITLE COMPETITION.

"Tired, Mother?" takes a first prize of £4 12s. 8d.

ENTRIES came in very well for the title competition this month, Mr. Roberts's clever picture of the old couple coming out of church seeming to lend itself particularly to a great many titles. Owing to the numbers and the necessity of going very carefully through the whole of the entries (greater than usual, on account of the close similarity between a great many of the proposed titles), we were not able to make the announcement last week, as we had wished. The total amount available for distribution was £13 12s. 8d., and this has therefore been divided into one first prize of £4 12s. 8d. and nine supplementary prizes, each of £1. The following is a full list of the awards and winning titles:

The Awards.

First prize £4 12s. 8d. Alice M. Cawthorn, 57, Freshfield Road, Brighton. "Tired, Mother?"

NINE PRIZES, EACH OF £1.

Miss M. Coles, Winterbourne Stoke, Salisbury. "My Auld Wife and I."

G. Bainbridge, Barnard Castle; Robert Taylor, 21, Lugsmore Lane, Toll Bar, St. Helens, Lancs.; P. Hitchcock, East Cottage, East Reach, Taunton; Walter C. Leafe, 12, Bouverie Road, Stoke Newington, N.E. "Discussing the Sermon."

Miss Madge Wilson, Cavendish Rectory, Suffolk. "Passion worn't quite so long-winded this morning, eh, Betsy?"

A. W. Powell, Hill View, Wickwar, Glos. "D'ye Remember?"

Joseph Edward Smith, Jesmond Dene, Stafford Road, Halifax, York. "Ye did not hear it all then, Jane?"

Henry Frost, 18, Ducie Street, Cork. "Strictly Confidential."

The Special Subject Competition for "A River Scene."

NUMEROUS as were the entries in this competition, far exceeding in this respect the "Dog, Cat, or Parrot" one, the average of merit was not at all a high one. We are afraid many of our readers, instead of, as on former occasions, doing work specially for the competition, were tempted by the character of the subject set, to send in prints from any negative they happened to have by them, with the result that the average of the quality is lower. Perhaps the nature of the next, "A Plant or Flower, taken growing out of doors," will be more favourable to successful effort. Particulars will be given next week, and the closing day, we would remind our readers, is July 31st.

The *Photography* silver plaque, which is the first prize, is won by Mr. E. Clarke, of Northville, Harrogate Road, Caversham, with a picture entitled, "On the Trywern, Bala."

The second prize, *Photography* bronze plaque, goes to A. W. Dale, 13, Lewes Road, Eastbourne, Sussex, for "The Medway, at Maidstone."

The third prize, *Photography* bronze medal, is awarded to H. Essenhigh Corke, of London Road, Sevenoaks, for "The Trout Stream."

Certificates are won by Herbert B. Smith, of 50, Devonshire Street, Keighley, for "On the Wharfe, Bolton," and by W. Clare, 16, Drayton Road, Tottenham, N., for "Sunset off Woolwich."

Advanced Workers' Competition.

QUANTITY well maintained, quantity showing the usual drop for the holiday season, as compared with last month, although in consequence of the combination of the two papers far ahead of previous competitions. Such is our verdict on reviewing the entries for June. The criticism is well in hand, but in consequence of the numbers to be dealt with, we must ask competitors who do not get their prints back at once to show a little indulgence. We hope to get the last off within a fortnight. The following are the awards:

First prize, *Photography* silver plaque, "The Bridge," by Easten Lee, 85, Osborne Avenue, Newcastle-on-Tyne.

Second prize, *Photography* bronze plaque, "The Connoisseurs," by Sydney H. Carr, Arkleby, St. Ives, Cornwall.

Third prize, *Photography* bronze medal, "Evening Sunshine," by Jas. E. Muter, 103, Simonside Terrace, Heaton, Newcastle-on-Tyne.

Certificates were also awarded to Edwin Marks, Copeland Street, Stoke-on-Trent, and to Arthur Dolden, Newhaven, Maple Road, Leytonstone.

The Beginners' Competition for June.

WE have got accustomed to the immense pile of prints which confronts us every month in this competition, and it has ceased to cause surprise. The June entry was as large as ever, and the work on the whole decidedly ahead of its predecessors. A good many of the competitors did not read the rules, to judge by the frequency with which these were broken. Rule 3 in particular was ignored by thirty or forty at the least, who sent their prints in mounted.

We should like to point out here, to those who take part in these competitions, that while mounted prints are not eligible, there will not be found amongst the rules any which prohibit the prints from being trimmed, and that a great

deal can be done by judicious trimming to increase a print's chance of success.

The first prize, a signed copy of "The Complete Photographer," is awarded to "Please, Rain, Go Away," by R. Gaffney, of 1, Carnarvon Street, Cheetham, Manchester.

The second prize, a free subscription to *Photography and Focus* for twelve months, is awarded to "Sunlight and Shade," by J. Aldridge, 22, New Brighton, Bramley, Leeds.

Certificates have been awarded to "To the Belfry," by W. J. Harley, 23, Leslie Road, Leytonstone, Essex; to "An Old Cottage," by F. W. Burton, 25, Radnor Park Crescent, Folkestone; and to "Eggs," by J. M. Petrie, 18, Marsden Road, Southport.



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BEGINNERS' COMPETITION.

Open to all photographers who have never taken an award.

PRIZES.

First Prize.—A signed copy of "The Complete Photographer," a half-guinea work by Mr. Child Bayley, now in its second edition.

Second Prize.—A free subscription to *Photography and Focus* for twelve months. One or more certificates of honourable mention will also be awarded.

RULES.

(1) Each competitor can send as many prints as he likes, but each print must bear on the back the coupon, published each week, the name and address of the sender, the title of the picture, and no other writing whatsoever.

(2) No print will be eligible that is larger than 5½ in. × 3½ in. (postcard size) or 5 in. × 4 in.

(3) No print must be mounted.

(4) No handwork other than simple spotting is permitted on negative or print, nor shading or dodging of any kind. It is distinctly understood that entry in the competition implies a declaration by the competitor that this rule has been complied with: and in case of dispute the editor shall have the right to call for the negative, from which the entry purport to be a simple direct contact print.

(5) No prints will be returned, and no correspondence with regard to the competition can be undertaken.

(6) The publishers of *Photography and Focus* shall have the right to reproduce, without payment, any of the prints sent in, winning or otherwise. But except the winning prints, the names of competitors of other prints that may be reproduced will not be published without the competitor's consent.

(7) All entries must be addressed "Beginners' Competition," the Editor of *Photography and Focus*, 20, Tudor Street, London, E.C., and must be delivered at that address by the first post on the closing date at the very latest.

CLOSING DATE.—Friday, July 31st.

SPECIAL SUBJECT COMPETITION.

There is also a monthly special subject competition, the rules of which are printed from time to time (see page 147, June 23, 1908, etc.) The subject for the month is a plant or flower taken growing out of doors. Entries close July 31st.



ADVANCED WORKERS' PRINT COMPETITION.

PRIZES.

First.—"Photography" Silver Plaque.
Second.—"Photography" Bronze Plaque.
Third.—"Photography" Bronze Medal.

One or more certificates of honourable mention will also be awarded.

RULES.

(1) All photographs must be sent addressed "Advanced Competition," the Editor of *Photography and Focus*, 20, Tudor Street, London, E.C., postage paid, to reach there not later than the first post on the closing date, and must contain a stamped addressed envelope or label (not loose stamps) if they are to be returned.

(2) Each photograph must be mounted, but not framed. Prints in slip-in mounts are not eligible. Each must bear on the back the name and address of the sender and the title of the picture. No letters or other communications must be enclosed with the prints. Every print must bear attached to its mount a coupon for the competition of the month, which will be found in each issue of the paper.

(3) Each photograph must be the work of the competitor as regards selection and arrangement of the subject, exposure and development of the negative, and printing, development or toning, and mounting of the print.

(4) The prints which are accompanied by stamped envelopes or labels will be criticised by post, and the editor shall have the right to reproduce any of the prints, winning or otherwise. The awards will be made a fortnight after the closing date.

(5) Awards may be increased or withheld at the absolute discretion of the Judge, and in all cases of dispute the decision of the editor will be final.

(6) There is no restriction as to the eligibility, except as set forth in these rules, and except that the same negative must not be used more than once in the competition. That is to say, that a print from it once submitted, all further prints, however varied, are ineligible.

(7) Neither editor nor publishers of *Photography and Focus* shall be held in any way responsible for the safety of prints, or for their return to the competitors.

(8) The sending of a print to the competition will be regarded as a declaration to the effect that it is eligible under these rules, and that the competitor agrees thereto.

CLOSING DATE.—Friday, July 31st.

TITLE COMPETITION. PICTURE ON PAGE 205. COUPON ON PAGE viii.

CONDITIONS.

- (1.) All entries for the competition must be sent by post, addressed "'Title Competition,' The Editor of 'Photography and Focus,' 20, Tudor Street, London, E.C.," and must reach there not later than the first post on Friday, July 31st, 1908.
- (2.) A competitor may send more than one entry, but each must be on one of the forms and must be accompanied by a postal order for sixpence.
- (3.) Nothing but the entry form and the postal order may be enclosed in the envelope, and no correspondence can be entered into concerning the competition.
- (4.) Late entries will be disqualified: the entry fees will not be returned but will be added to those of the next "Title Competition."
- (5.) The awards will be made by the Editor of "PHOTOGRAPHY AND FOCUS," whose decision will be final.
- (6.) No responsibility for missing entries or for entries which, from any cause, are not adjudicated upon will rest with the organisers of the competition.
- (7.) The prizes will be in cash. After deducting ten per cent. for clerical expenses, the entrance fees will be distributed as follows: One third of the amount will form the first prize, and the remaining two-thirds will be divided into separate prizes of (approximately) £1 each.



Wellington

CARBON

S.C.P.

FOR PRINTS OF SUPERB VIGOUR.

From a Negative on a "WELLINGTON" SPEEDY PLATE.



FILE

*"The time has come, the Walrus said,
to talk of many things."*

EVEN our ancient friend "the veriest tyro" soon discovers that all branches of photography are not equally fascinating and pleasant. As to old stagers, they have learnt long ago to dodge certain subjects as they would the plague, while they track other subjects down with the unerring instinct of a bloodhound on the track of a fishmonger.

* * *

I was reminded of this wide difference in the attractiveness, or otherwise, of photographic subjects, by a letter from a friend, who is one of those lucky persons able to take a summer holiday. He spent a long day trying to get a rendering of foreground sheep in a summer landscape. "From morn till noon he worked, from noon till dewy eve—a summer's day" (with apologies to Milton for the alteration of a word). The landscape was there all the time.

* * *

That is one advantage of a landscape. It stays where it is.

* * *

You don't find trees sprinting across the meadows while the distant hills set to partners for the first figure of the lancers. There is an immobility about a landscape that is most praiseworthy and helpful. But the sheep! Those sheep! How I pitied my friend. I know those sheep. I have tried to photograph sheep myself.

* * *

I remember once when I was in Wales that I determined in the most off-hand and light-hearted manner that I would do a pathetic picture of "The Lost Sheep." The wild mountain scenery was just the right setting; and the miserable, ragged, dirty, unshaven, scraggy, been-up-all-night, fat-headed sheep was in just the right spot. Till I got the camera ready. Then the mangy mutton stepped on to the next mountain. I followed. It stepped again. For seven long, weary years I followed that beast about till it grew old and weather-beaten, and looked like a bit of a skin rug in a third-rate boarding house. At last I grew impatient, and resolved that as I could not photograph the brute I would eat it. And I did. I had mint sauce with it and called it lamb.

* * *

Wherefore it was no surprise to me to learn that my friend proposed to spend the remainder of his holiday in going about the country branding a rude word on the back of every sheep he found. I wonder photographic dealers have not long ago included in their catalogues branding irons to enable photographers to record their indelible opinion of the common or meadow sheep on the beast's own all-wool overcoat.

* * *

But my holiday-making friend is a young man of exceptional wisdom. Turning in disgust from the impossible pictures of sheep in a landscape, he dedicated the rest of his plates to renderings of the fair daughter of his host. It was on the score of his photographic studies that he justified to her father their long lingerings in the summer-house two or three hours after sunset. The father knew nothing about photography, but I believe he had his doubts.

* * *

Now, my point is this. Why should any sane photographer (if a photographer *can* be sane) spend his time trying to photograph sheep, and be betrayed thereby into the employment of language that will assuredly imperil in another world such chances as he may have left, when all the while he might be making figure studies (I use the term in a purely Pickwickian sense) of his host's, or somebody else's, daughter? It is mere midsummer madness.

Sheep are all very well in their place; but their place is in an Irish stew, or mixed up with curried rice. They should not figure in a photographer's subject notebook. But daughters—host's daughters or otherwise—ah!! And yet again, R!!!

* * *

I can always photograph daughters. I am no hand at landscapes, and my architectural work is beneath contempt. But give me daughters and I do myself credit. Sons I don't succeed with. As surely as I attempt the portrait of a man he looks, not to put too fine a point upon it, a sap-headed idiot. A wax figure modelled from that portrait would be ignominiously kicked out of the Chamber of Horrors at Madame Tussaud's by the other waxy inhabitants of that temple.

* * *

I read the explanation of this the other day. It appears that a portrait will make a person look stupid when the producer of that portrait is himself stupid. It is not a flattering explanation, but I fear it is true. My portraits of men constitute a collection of the most unholy chumps that ever darkened the light of day or struck terror into the hearts of their beholders. I took them, and it seems I am responsible for their appearance. Their look of wild, scatty lunacy is but a reflection of my own. They are, as it were, my mirror. Confound them.

* * *

But soft you, now. The gentle being who advanced this explanation goes further. He states that the best portrait of a daughter (anybody's daughter) will always be produced by one who loves her. I snatch comfort from that. As I said, I excel in the portraiture of daughters. I didn't know why it was till I read the explanation. I realise now why it happens that some of my portraits of daughters are not as good as others.

* * *

There is that side elevation of Araminta Sploggs, for example. I was never really satisfied with it. Nobody was. Clearly I took it before I was ripe. I should have waited. I should have said, "Araminta, I cannot yet do you justice. Do not chide me. Be patient. The blossom of my love is as yet but in the bud. Kiss me, and go. Call on the second Tuesday in each month, and let us trust to Time. Never let me see you except in a half light, and with as little of your face visible as may be, and perchance the day may yet come when I can take your portrait with confidence. But not yet, Araminta.

* * *

Great Scott, not yet!

* * *

On the other hand, I can get a ripping portrait of Phyllis, or Ermintrude, or Sophonisba any time they like to pop in. But no man should permit me to photograph him. The proof print would be a certain passport to any asylum at which it was presented.

THE WALRUS.

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PHOTOGRAPHY JULY 21ST, 1908

PHOTOGRAPHY

A JOURNAL FOR EVERY CAMERA USER.

EDITED BY R. CHILD BAYLEY.

PUBLISHED WEEKLY.

JULY 21ST, 1908. TUESDAY. No. 1,028. Vol. XXVI.



A WINTER'S MORN.

BY G. BROOK.



EDITORIAL

Developing Orthochromatic Plates.

Those who are not familiar with the use of orthochromatic plates, especially with a colour screen, may not know that they possess one or two peculiarities which manifest themselves in exposure and development. For one thing, as we have pointed out recently, unless the exposure is a full one, a good deal of the colour correction which might fairly be expected from the materials used will be lost. With only a slight degree of under-exposure, the greens and yellows seem to be unaffected, and show in the print almost as dark as if no attempt at orthochromatism at all had been made. There is a similar unexplained phenomenon in development. The development must be full if the colour correction is to be complete. Different developers vary in this respect, but the effect is seen most conspicuously in the case of metol. Full development of an orthochromatic plate, it might be added, does not necessarily mean that the negative will be a very vigorous or harsh one. Orthochromatic results, especially in the case of landscapes, always seem softer and more harmonious than those obtained on ordinary plates.

We might, perhaps, add that there seems to be a fairly general consensus of opinion against using pyro-ammonia for the development of orthochromatic plates. The idea seems to be that it tends to give foggy results. On the other hand, we know two expert workers, at least, who never use anything else for the purpose, yet whose negatives on orthochromatic plates are as clean and bright as could be wished. So that there cannot be very much in it either way.

The Sixteenth Salon.

The entry form for the sixteenth Photographic Salon has just been issued, and serves to remind us how soon the autumn exhibitions will be round again. August 31st is the receiving day, and less than a fortnight later will see the exhibition open to the public. The Salon this year promises to arouse a certain degree of curiosity. Those who have watched the trend of events in the little world of pictorial photography tell us that, consciously or not, the Linked Ring is at a parting of the ways. One road is the broad path of smug orthodoxy, already occupied, and effectively occupied, by the Royal Photographic Society. The other is the decidedly thorny path of artistic innovation which the Salon in its earlier days professed so loudly to be its own selection, and indeed the reason

why it existed at all. That time has long gone by, and to-day the Salon stands in very much the same position towards pictorial photography as did the R.P.S. before the formation of the Ring. Another Salon, like that of last year, with those men absent who stand for all that is newest and most original, would mean that beyond providing a gallery for the few "Links" who exhibit, the exhibition had outlived its usefulness.

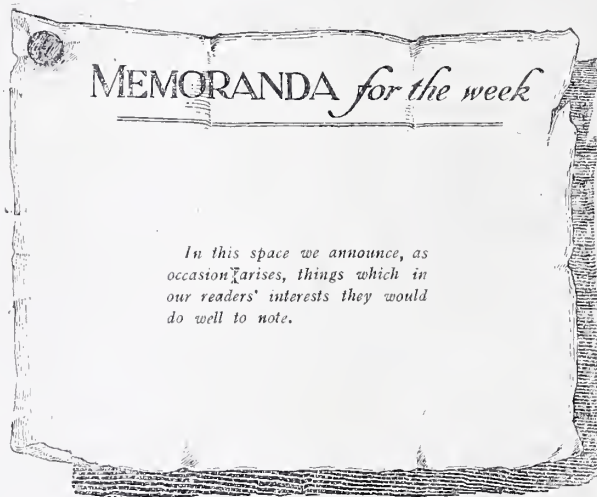
That the Salon authorities regard the exhibition as one of a similar character to that of the Royal Photographic Society is shown by a paragraph in the prospectus which states, in effect, that pictures of which duplicates are sent to the R.P.S. will be disqualified. The exhibitors will have no right to complain of this,

and the visiting public will, no doubt welcome anything that prevents duplication; but from the point of view of progress this admission that the Salon is virtually identical in scope and aims with the New Gallery show is to be regretted. The justification of the Salon would be in the acceptance of work too modern and novel in character to secure admission at the R.P.S., and any hope there may be for its future will lie in this direction. Another novelty which we notice in the prospectus this year is a column in which the

exhibitor can state if the number of duplicates of his picture which are for sale is limited, and, if so, to how many copies.

Drying a Negative Quickly.

Although the film of a negative ought to be treated with respect, if it is not to be injured, there are certain forms of treatment which it will stand, and which are at times very useful. For example, if we have a plate which we wish to dry as quickly as possible, but have no methylated spirit available, the following plan will hasten the drying very considerably. A fine smooth clean cambric handkerchief, folded in two or more, is laid evenly down on the film side of the negative, which latter has first been placed on some flat surface. Two or three pieces of plain paper, or blotting paper, are put on the top of the handkerchief, and then a roller squeegee is passed two or three times over the top, with a medium pressure. On gently pulling the handkerchief off the plate, it will be found that it has abstracted a great deal of the moisture; so much, indeed, that the negative will be dry in less than half the time which it would have taken if this treatment had not been applied.



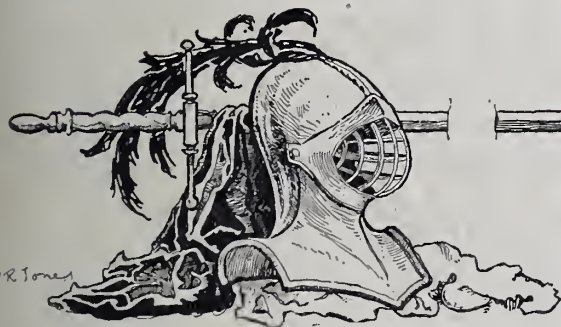
BOBBY'S BROWNIE.

I have a son who's caught the craze,
 For Bobby's bought a Brownie.
 Now ended are my peaceful days,
 Since Bobby bought a Brownie.
 My darkroom is a shocking sight,
 My measures cracked, my lamp won't light,
 The dishes are no longer white,
 Since Bobby bought a Brownie.

My twelve-ten sheets of P.O.P.,
 Since Bobby bought a Brownie,
 Are not the slightest use to me,
 Now Bobby's bought a Brownie.
 For every lot which I've unpacked,
 In tiny little squares is hacked;
 There's not a single sheet intact
 Now Bobby "works" a Brownie.

We have no carpet free from stains,
 Since Bobby bought a Brownie.
 We've prints squeegeed on window panes,
 Since Bobby bought a Brownie.
 He laughs to scorn my fearsome frown,
 At towels which are patched with brown;
 While push pins lurk where I sit down,
 Since Bobby bought a Brownie.

I've tried to barter, but in vain,
 With Bobby for his Brownie.
 I've offered him my watch and chain,
 But Bob prefers his Brownie.
 I'm dreading lest the day should come,
 When Bobby starts with "oil" or "gum,"
 I hope ere that, some modest sum
 May purchase Bobby's Brownie.



MONDAY, JULY 20TH.

Walthamstow P.S. "Hints on Photographing Trees." R. G. Rolfe.
 Blackpool & Fylde P.S. L. & C.P.U. Annual Excursion.

TUESDAY, JULY 21ST.

Batley D.P.S. Around Batley.
 Nelson C.C. Ramble and Question Evening.

WEDNESDAY, JULY 22ND.

North Middlesex P.S. "The History and Development of Coinage." T. W. Reader.
 Everton G.C. "Composition." G. Taylor.
 Manchester A.P.S. Moreton Old Hall.
 Windsor P.S. Meet at Rooms.
 Balham C.C. Members' Night.

THURSDAY, JULY 23RD.

Barrow-in-Furness Naturalists' Field Club. Roanhead.

SATURDAY, JULY 25TH.

Maidstone and Institute C.C. Rochester.
 Harwich I.A.P.S. Mytton and the Hodder Woods.

Societies will have their meetings announced here if the syllabus is sent to us at the beginning of the Session, or from time to time

The Photographic Convention.

Although a good many of those who have been its consistent supporters for many years failed to put in an appearance at Brussels, the Convention was well attended, and a very enjoyable week was spent under the kindly authority of its genial president, Sir Cecil Hertslet. Next year, we learn unofficially, the convention is to be held at Canterbury.

Daylight Dark Rooms. A Caution.

Now that the brilliant light of summer is with us, a word of caution becomes seasonable for those whose dark rooms are lit, not with a lamp, but with daylight. In most cases, the window is protected by coloured paper or fabric, and the condition of this should be looked to. It may have been quite satisfactory last year, but it has been exposed to daylight ever since, and none of the dyes used in these coloured media are absolutely permanent. The fading, which is sure to have taken place, may not have gone so far as to lead to fogging, when the window only had to filter out the weak light of winter; but in the more intense illumination of summer it may have made it quite unsafe. In such a case there is nothing for it but to clean all the paper or fabric off and provide fresh.

Where glass, as well as fabric or paper, is used, a great deal of the fading may be prevented by putting orange or ruby glass on the outside and the other material within. Stained glass is far more permanent than dyed fibre of any kind, and the glass not only does not itself alter, but it largely protects the paper or the fabric from the actinic rays, which are most active in causing fading.



The Week's Meetings

SATURDAY, JULY 25TH (continued).

Batley & D.P.S. Sandal.
 Walthamstow P.S. The Forest Pools, near Loughton.
 Ashton-under-Lyne P.S. Adderley.
 Northamptonshire Natural History Society and Field Club. Warwick.
 Watford P.S. Aldbury and Ashridge Park.
 Paisley Philosophical Institution. Lochwinnoch.
 Attercliffe P.S. Ecclesfield Church.
 Blackpool & Fylde P.S. Brock Bottoms.
 Coventry P.C. Baginton and Stoneleigh.
 Wallasey A.P.S. Moreton.
 Rugby P.S. Warwick.
 Boro Poly P.S. Southend.
 Blackburn & D.C.C. Feniscowles to Withnell.
 Southend-on-Sea P.S. Horndon-on-the Hill.
 Nelson C.C. Marton.
 Nelson P.S. Admergill.
 Todmorden P.S. Luddenden Dean.
 South Suburban P.S. Chislehurst.
 Barrow-in-Furness Naturalists' Field Club. Piel Castle.

MONDAY, JULY 27TH.

Bradford P.S. Kirkstall Abbey.
 Southampton C.C. "Art in Photography." C. Daw.
 Bournville & D.P.S. Northfield.
 Liverpool A.P.A. Ludlow.



On Refinement.

By F. M. Sutcliffe. Special to "Photography and Focus."

IF anyone who has made it his business to study photographs for the last twenty or

thirty years were asked to say in what direction he had noticed the greatest improvement, he could answer, without hesitation, refinement. Then

perhaps his questioner would stuff his handkerchief into his mouth to keep down his laughter before he could reply, "Refinement. Then it is pretty certain you never see those coloured things, which I suppose are photographs, in the postcard shops."

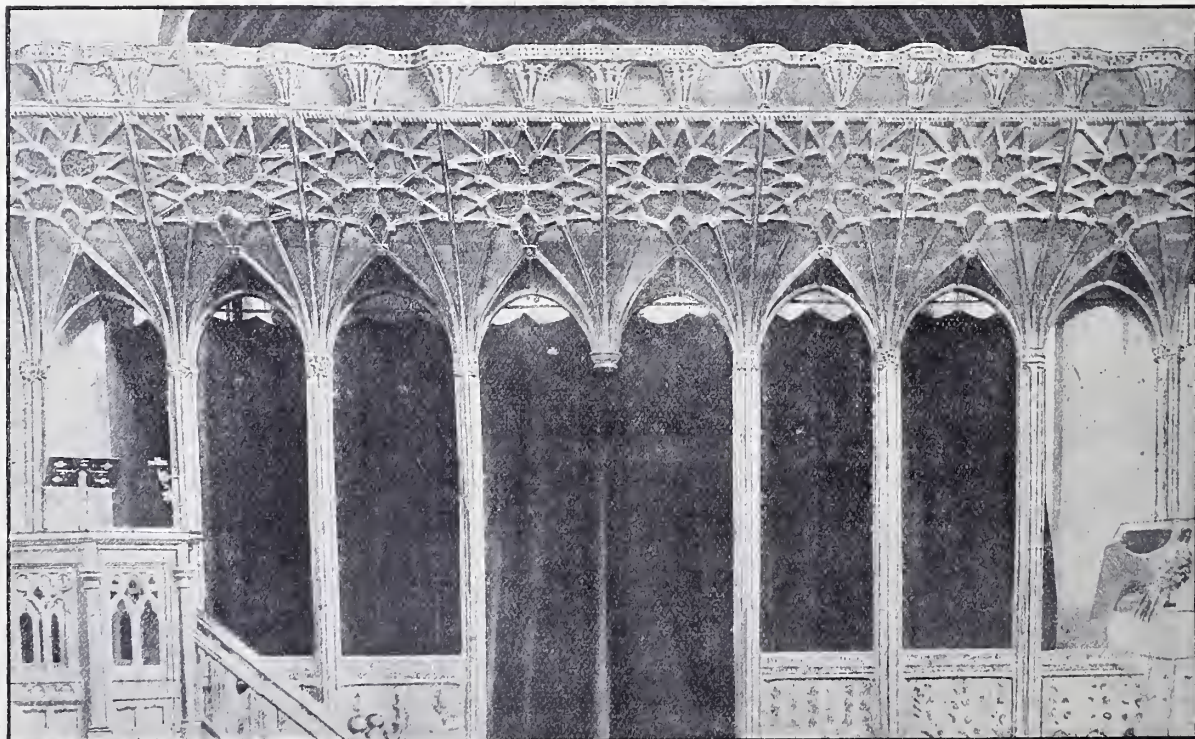
It is not that more refined subjects are always chosen by photographers; but that they are able to detect, and render more delicate and subtle effects of light and shade.

There are many reasons for this. The use of the dry plate for the wet one is the greatest. When dry plates first began to be used, they were only tolerated because

of their speed, and because they did away with much impedimenta, such as dark tents, silver baths, water bottles, etc., etc. Those who use them complained that their pictures were flat and wanting in vigour. It was so easy to make a wet plate negative strong by adding silver to the redeveloper that the new dry plates seemed to be too thin; but when photographers had had more experience in developing them, they found it was quite easy to get sufficient strength, and they found as well that the finished prints were more truthful than those done by the old process. The print was perhaps not so powerful in its rendering of light and shade, but the different tones were rendered with much greater delicacy and with more accuracy.

Another aid to refinement is the introduction of orthochromatic plates and the use of the yellow screen with them.

Pictures made with the help of these may not seem at first glance any better than those made on the "ordinary" plate; but that is because we have become so accustomed to the untruthfulness of the "ordinary" plate that we do not always see until it is pointed out to us, or until we have an incorrect picture of the same subject to compare with our improved version,



VAULTED SCREEN AT MOBBERLEY, CHESHIRE.

From "Screens and Galleries" (see page 203). By the courtesy of the publisher.

how much more truthful and sweet our new pictures are.

The exhibitions held by the Linked Ring have done much towards refinement. At first there was an outcry about these exhibitions because many of the works did not look like photographs; and even to-day these are sometimes compared to imitations of wash drawings, and the like. But we have only to look at the best works at any exhibition of photographs to-day to see how the influence of the Salon has made the slaves of the old photograph free men.

To-day a photographer is his own master. He may please himself whether he prints his pictures as light as a silver point etching or as dark as a poker drawing; and no one will tell him that they are not printed enough or printed too much.

If his works do resemble silver points or poker work it is because he has not felt himself tied down to making

one of the old regulation photographs, which, by the way, had for their prototype either a steel engraving or a woodcut. It has taken photographers nearly fifty years to gain courage to throw off the imitation of brilliant black and white work, which was too often coarse and exaggerated. That photography, even yet, has not been able to approach the best black and white work in woodcut and steel engraving only shows what rare skill had such artists as Goodhall, who engraved Turner's vignettes in Rogers' poems, and others equally able, and how exquisitely refined were their powers of eye and hand.

If the works shown at our photographic exhibitions show great improvement year by year, there is still much room for amendment on the part of magazine printers. Some of the half-tone blocks they make are conspicuous for one thing only—the want of all half-tone.



Church Screens and Galleries.

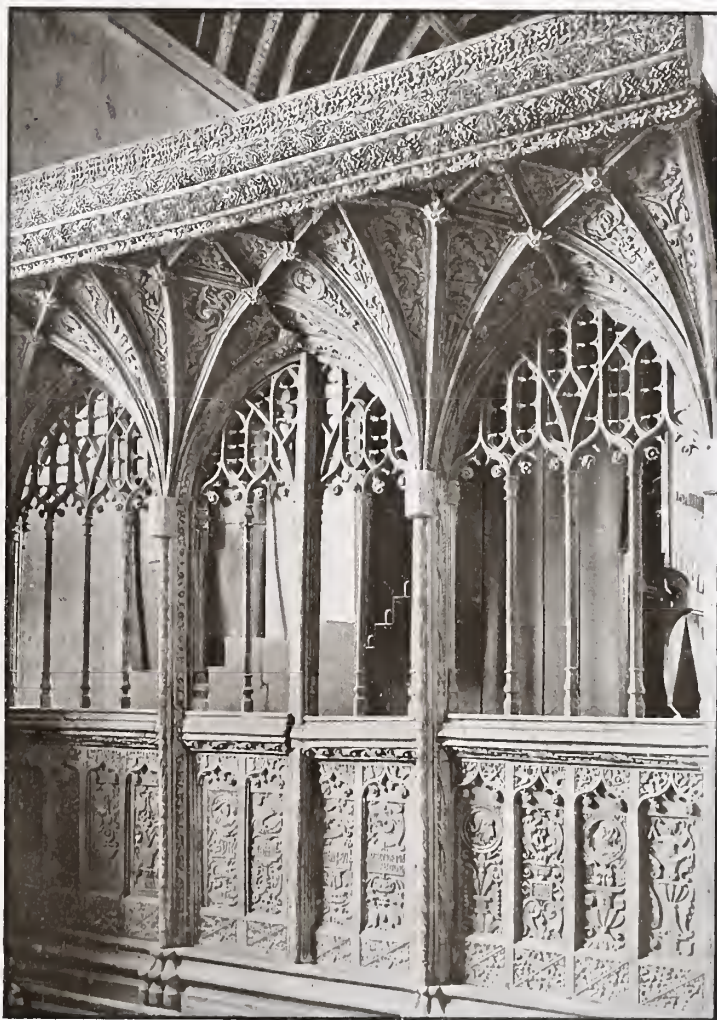
Specialisation in Photography.

IN an article in *Photography and Focus* recently, we described how a photographer in London might arm himself with a copy of "London Churches," by Mr. Bumpus, and specialise in the ecclesiastical buildings of a district. Another work just to hand, "Screens and Galleries," by Mr. Francis Bond (London: Henry Frowde; cloth 6s. nett), in like manner serves to show another direction for such specialisation.

It is a book which may not only serve as a guide to this particular feature of our churches, it may well serve as a collection of models to show what photographs of architectural detail should be like. It is illustrated by nearly a hundred and fifty admirable photographs, admirable alike in their photographic technique and in the clearness and definiteness with which they tell their story. We have never seen a book on such a subject so adequately and so well illustrated, yet without any superfluity. Some photographs are by the author, but many are by members of the Architectural Detail Postal Club, and bear names familiar to all photographers.

The subject of the Rood and Rood Screen is traced from its origin in early Christian churches, and its growth and development under ritualistic changes down to the eighteenth century. The wholesale destruction of these objects of great beauty and interest which has taken place from time to time, the conversion of screens into galleries or gallery fronts, and the church bands which often occupied such galleries, are amongst the topics dealt with in a book which maintains its interest well from beginning to end.

By the courtesy of the publisher we are enabled to produce this week a couple of the illustrations from the book, which will serve to show the nature of the photographs which play so large a part in it. One of these is on this page, and one on page 218. Although a great many screens are pictured in the book, there are hundreds of these beautiful features of our churches which are not so recorded, and if we might make the suggestion, they offer an excellent



THE SCREEN AT MARWOOD.

By the courtesy of the publisher of "Screens and Galleries."

field for some photographer who wishes to take up some archaeological subject in which he can do good useful work. Mr. Bond's book will not only show him at what to aim in the direction of technical excellence, but will also be found to indicate to him many places where good examples are still to be met with.



Beverley Minster. By H. W. Bennett.

Special to "Photography and Focus."



ALTHOUGH Beverley is a small town, it possesses two magnificent churches—the minster at the south end, and the parish church of St. Mary at the extreme north.

A full description of the latter does not come within the scope of this article; but visitors to Beverley should not, under any circumstances, lose the opportunity afforded for seeing it. It is cruciform in plan, and one of the finest Perpendicular Gothic churches in the country. Like many parish churches of the Perpendicular period, it has a very fine porch at the south-west corner.

The minster church is much earlier in style; it is principally Early English; the east end, dating from the end of the twelfth century, being exceptionally fine. The west front and some other fragments are Perpendicular, but much more lofty and graceful in character than most Perpendicular Gothic buildings. This is apparently due to the fact that the west front had to be the termination of a lofty Early English church, and this necessitated retaining the original proportions; and, fortunately, this loftiness and gracefulness has been sustained throughout. The two western towers are tall, slender, and graceful, and, although in all other respects they

sides excepting the south. There is a lane, however, running southwards from the south-west corner of the church, from which a good view of the towers may be secured. Almost any lens may be used, though one of short focus will be the most satisfactory. The nearer point of view allows greater separation between the minster towers and some ugly houses near.

From almost any point further down the lane a general view of the exterior may be had. A lens rather longer in focus than the length of the plate will be best—about eight or nine



The Choir, looking westward.



The Western Towers.

inches for half-plate—as from the distance suitable for such a lens better foreground and more pleasing composition can be secured.

There are five or six good doorways, Early English and Perpendicular. Those on the south and west sides can be photographed most satisfactorily, on account of the direction of the light. The exposure should be one-eighth of a second, under the best possible conditions, using lens aperture $f/16$, and a rapid plate—200 on Hurter and Driffeld's standard.

The interior is very attractive. The plan is a double cross, like the cathedrals at Lincoln and Salisbury, there being two small eastern transepts in addition to the large principal transepts west of the choir.

About two-thirds of the nave is usually filled with chairs,

are essentially Perpendicular in style, they form a pleasing departure from the more common type of Perpendicular church towers, which are much broader in proportion to their height, and solid and massive in appearance rather than graceful.

A good view of the west front cannot be obtained, in consequence of the church being surrounded by houses on all

but there is a large free space at the west end from which a good general view may be obtained, showing the general character of the work. The exposure should be forty-five



The South Door.

seconds, using $f/16$ and a rapid plate—200 H. and D.—under the best possible conditions. It should be photographed in the early afternoon.

There is no triforium, but in its place there is a shallow arcading, enclosing a second in which the arches are much lower and supported on very short columns, these columns being in the centre of the arches of the first arcade. Only a few inches space separates the two. The clerestory is high and graceful, the roof vaulting springing from the same point as the clerestory arches. The Early English roof runs the full length of the church, and the general character described and illustrated in the nave prevails throughout.

The transepts offer little opportunity for photographic work; they are short repetitions of the nave.

A modern screen of wood separates the choir, and stone screens the aisles of the choir, from the nave; and the most attractive photographic work will be found to the east of this division.

The choir is not so good a photographic subject as in some cathedrals; the stonework is similar in character to that in the nave, and the choir stalls are good. The organ is very unattractive, and partly on the rood screen, but it is not so obtrusive as in many cases. A general view looking westward will require eight minutes exposure.

The south aisle of the choir is valueless photographically, as it contains the greater part of the organ, but the north aisle forms a very attractive subject in itself, in addition to providing two or three good small fragments. It contains a very fine double stairway, which originally formed the approach to the chapter-house. Under the centre of this stairway is a door leading to a small crypt, now used as a coal store. The exposure for this aisle should be about seven minutes, under the same conditions as specified for the other subjects. A short-focus lens must be used, about three-fourths of the length of the plate only, as a pair of hammered iron gates across the arch leading to the transept necessitate that the camera should be placed very near the stairway. This assumes that it would be taken from the east end—the best position. Any lens might be used if the gates were included in the picture, but the view of the fine stairway would be partially hidden by the gates.

Adjoining the north end of the reredos, and filling the lower part of the arch communicating with the north-east transept, stands the Percy shrine—a very elaborate monument in Decorated Gothic. It may be photographed as a whole, either from the choir or from the north-east transept. The richly-

decorated canopy and upper portion form an attractive subject if taken from the top of the reredos. From the transept the exposure should be four minutes under the conditions previously given; from the other two positions one minute will be sufficient. The top of the reredos is a broad platform, which is reached by a small stairway.

There are two or three small chapels which are rather difficult to arrange satisfactorily, but under suitable conditions they may form effective subjects. For those who like to photograph architectural detail there is abundant material—rich, varied, and good. While most of the fine detail work is to be found within the church, there is still some very attractive on the exterior.

Permission to photograph is readily given by the vicar. The daily services are at 8 a.m. and 5 p.m., excepting on Wednesdays and Thursdays. On the former they are at 11 and 5, and on the latter at 8 and 7.30. A visitor's fee of sixpence is charged.

A Remarkable Photograph of Lightning.

A READER, Mr. A. E. Clifford, has sent us the remarkably fine photograph of lightning which he secured during the storm early on the morning of June 1st. There can be little doubt that the plate has recorded three distinct flashes, one of which reached the earth. This particular flash is noticeable for the great variation in its width at its two ends. It commences as a fine line, while the lower part, to judge by the trees which stand out against it, must have been several feet in width.



Lightning, taken during the storm of Monday, June 1, 10.30 p.m. Exposure twenty minutes Imperial N.F. Plate. By A. E. Clifford.



A CRITICAL CAUSERIE.

By "The Bandit"

Concerning some Photographs by Beginners.

"Critics?—appalled I venture on the name,
Those cut-throat bandits in the path of fame."—BURNS.

IT is customary—and easy—to sneer at photographic groups; but the sneering has not, as far as I am aware, taken much effect. The habit of group-taking comes naturally to all: its roots are bedded in an instinct of human nature. The Royal Family (if one may judge by the illustrated papers) are perpetually being taken in groups,

composition (and there is such a thing as composition even in the most formal of groups) to bad portraiture. Bad portraiture I ought, perhaps, to have put first; for with good portraiture one might forgive the most hideous composition. "How do you know that the faces in this group are bad portraits?" someone asks; "you have never seen

the models, have you?" No, I haven't. But I'm positive they don't look like that if the photographer has been honest in his title. Play is the last thing in the minds of these miserable mutes. Some of them in the front row are sulky; one at least is on the verge of tears; and only a single cynic in the back row wears a smile—which he is visibly and conscientiously trying to stifle. They have been packed tight,

these unfortunate kids, and told not to move or they'll spoil the picture; and to tell a child not to move is far from being a wise course of procedure if you want it to look playmate-like.

"But children are so difficult to make a group of," I hear another reader protesting. Then why make a group of them? At any rate, why make a group of this sort? Look at "Making Sand Castles," and then compare it with the dreary "Playmates." Was there ever a finer object lesson in the right and wrong way to do a job? I grant that the Sand Castles picture contains fewer models, and was therefore easier to manage than the crowded "Playmates;" but that only shows the photographer's wisdom. The "Playmates" photographer bit off far more than he could chew. He tried to produce portraits wholesale—a "shipping order" of children's faces. Portraiture shouldn't be wholesale; and it is because most groups are an attempt at wholesale portraiture that they fail. The more faces you cram on to your plate, the more chances are there of failure.

"Sand Castles" is, maybe, a shade self-conscious; but compared with the self-consciousness of "Playmates" it is



Playmates.

By Henry Richardson.

and so are the Smiths of Surbiton. I hope I am not such a snob as to make fun of the Smiths' group while maintaining a polite silence concerning that of the royalties. No royalties having entered for recent "P. and F." competitions, however, I run no risks by choosing my material for this article from the prints to hand.

I am afraid I must say at once that certain of the groups which lie before me are out-and-out bad. Yet, bad as they are, I realise clearly that they may have given pleasure; and after all, is there much to be said when one has admitted that? Well, the excuse for my carping criticisms must be this: If these groups gave pleasure though they are bad, might they not have given even more pleasure if they had been good? I think so. And this argument justifies the pointing out of their faults.

"Playmates" is a typical group of what one may dub the conventional school. It has every fault, from bad



Making Sand Castles

By W. Sampson.

nothing to grumble at. I warrant, too, that the mother of the "Sand Castles" urchins is a deal more pleased with this picture as portraiture than any one of the mothers of the "Playmates" phalanx. The former is true, the latter is false.

Mere truth is not quite enough, though; witness "A Happy Trio." I may be wrong, but I expect that each of these portraits is peculiarly good *quâ* "likeness." These three are comfortable and at home on their bench in the back garden; and when you can photograph people who are comfortable you get them looking like themselves. Nevertheless, this is a singularly poor specimen of the Group genus. Each face competes with its neighbour for our attention (a common fault in groups), and all three being on the same "horizon line" and fairly equidistant, they are monotonous and lack balance. Observe the balance in "Sand Castles," which also has three figures, and compare its pleasant vivacity with the dull levelness of the "Happy Trio."

I don't say that the "Happy Trio" should be driven forth into the garden with pails and spades; but I insist that they might be doing something—taking a cup of tea, or employing themselves in some natural and lively occupation, and thus showing their characters a little more.

Liveliness, let it be added as quickly as possible, is in itself a pitfall of the group-maker; for there is a liveliness more artificial than any lethargy. "The Letter" is an honest attempt at liveliness in a group—yet strikes one as being neither very funny nor very good portraiture. The reason it fails is because it is stagey; and staginess is the last thing you want in a branch of pic-

ture making which essentially claims to be naturalism. "The Letter," though it aims at action, is really as wooden as "Playmates." In both cases the models are posed in attitudes which they would never adopt in real life; and though I rate "The Letter" higher than "Playmates," because the former at least aspires to novelty while the latter follows an ancient and decayed convention, nevertheless I cannot believe for a moment that any unbiased judge would call "The Letter" a satisfying group.

"An Afternoon Stroll" is probably the best group, as portraiture, in my batch. Its scattered interest and its blank sky are two faults which one notices immediately; but they are outweighed by the sense of reality, of verisimilitude, which the picture conveys. The fact is, we can overlook any amount of bad photographic technique if a picture at once makes us exclaim, "What a speaking likeness!" People don't care a farthing about technique if you can give them this boon. I guess that the friends of these three youths appreciate this print, and pronounce its figures "the very image of —." More than that one does not ask for, in a group.

Let me again emphasise, finally, the point that the sitters in a group—and it is for them that the group is usually taken—are much keener on getting likenesses of themselves than on getting a *tour de force* of technique, or even an artistic picture.

At first sight this may seem to the reader to justify the wooden all-in-a-row style of arranging your congregation. This is not so. To mass people in a bunch on a doorstep, tier above tier, may result in displaying each face clearly; but that is not enough. The

faces must be likenesses. And to get likenesses by forcing people to do an unnatural thing, and to keep on doing it for several minutes, is impossible.



An Afternoon Stroll. [By H. R. Hathrill.

Pose the typical wooden group, and before you have focussed and put in your dark slide, every face in it will either be wooden too, or else struggling to suppress hilarity.

Thus the prime argument to be brought against wooden conventional groups is not that they are bad craftsmanship, but that they result in bad portraiture. Bad craftsmanship may be forgiven; bad portraiture, never. In other words, "A Happy Trio" may pass muster, and "Playmates" can't; though both have similar faults of construction. But all are beaten hollow by "Making Sand Castles"—which gives us both portraiture and a true life story within one frame.



The Letter.

By T. Brown.



A Happy Trio.

By O. H. Marshall.

DIRECT COLOUR PHOTOGRAPHY. In a recent patent, Herr Szczebanik proposes to coat the screen plate with two emulsions—a quick one on which the first or negative image is impressed, and a very slow one which is not affected by the first exposure, but can serve as the basis of the positive image by being printed after the negative one has been developed.

HOLIDAY INFORMATION.

A System of mutual help amongst the Readers of "Photography and Focus."

WE invite our readers who know good districts for photographic work to send us short reports, on the lines of those printed below, for filing. A copy of such a report will be supplied to any reader writing for it and enclosing a stamped envelope. No payment will be made for the reports, and no charge made for supplying them. We give below a preliminary list of the places of which we have reports, and shall be glad if readers will help to fill in the many blanks.

Information is urgently wanted concerning

Anglesey.	Gorleston-on-Sea.	Ramsgate.
Bristol.	Hawkhurst.	Redcar.
Criccieth.	Lynmouth.	Wantage.
Dartmouth.	Minehead.	Warwick.
Ely.	Oxford.	Woodhall Spa.

Information can be supplied about the following:

Abbotsford.	Fowey.	Penrith.
Alfreton.	Glasgow.	Penzance.
Antwerp.	Gravesend.	Pontefract.
Ashbourne.	Guernsey.	Port Erin.
Ashford (Middlesex).	Hereford and the Wye.	Sandown.
Bangor.	Horsham.	St. Jean de Luz.
Barmouth.	Huddersfield.	Scilly Isles.
Blackpool.	Huddersfield (Beaumont Park, near Lockwood)	Seaton (Devon).
Bognor.	Ilfracombe.	Shanklin.
Boscombe.	Inverness.	Sheffield and District.
Boston and Crowland.	Isfield and Barcombe Mills (Sussex).	Skibbereen, N.W. Cork.
Bournemouth.	Isle of Man.	Slough.
Brays.	Jersey.	Stranraer.
Brighton.	Keswick.	Swanage.
Brookenhurst and New Forest.	Kirkstall.	Teignmouth.
Castle Douglas.	Leatherhead.	Tewkesbury.
Chesterfield.	Leeds.	Tipperary (North).
Clitheroe.	Llandudno.	Topsham (Devon).
Colne.	Llangollen.	Torquay.
Colwyn Bay.	Looe (Cornwall).	Twyford.
Cowes.	Maidstone.	Wells-next-the-Sea.
Dresden.	Margate.	Whitby.
Durham.	Midhurst.	Whitchurch (Salop).
Exeter.	Neath (the Vale of)	Wicklow.
Falmouth.	Norwich.	Winchelsea and Rye.
Fleetwood.	Oxford.	Withernsea.
Folkestone.		Wolverhampton.
		York.

TWYFORD.

In reply to G. FORMAN.

Twyford, thirty miles from London on the Great Western main line, with a fine service of trains, is a good photographic centre. It lies between Reading, Wokingham, Henley, and Maidenhead, all within easy distance, and is a clean healthy village. At the Royal Station Hotel the visitor will be well looked after, while for those who prefer a private house Mr. Garratt, in the Station Road, can be recommended. Photographic materials are supplied at a chemist's, but there is no dark room available.

Pictures can be found on the river Loddon, which passes through Twyford. The Almshouses, built in 1640 by Sir Richard Harrison, are also worth notice; the porch is a fine specimen. Adjoining Twyford on the East is Ruscombe with its ancient church, the chancel dating back to the 12th century. The tower and nave were built in 1639. Stanlake House, with its lake and park, should not be missed. It is a beautiful old mansion. The

stable clock is curious; instead of figures it bears the letters of the word R.E.F.O.R.M.A.T.I.O.N.

Two miles south of Twyford is the village of Hurst, where agricultural subjects are to be found. It, too, has a fine old church; there is an hour glass beside the pulpit presented by Archbishop Laud. The old-fashioned inn, the Castle, or as it is more commonly called, the Church House, is very comfortable. At the back is a classic bowling green. About a mile away is the picturesque Sandford Mill, a spot loved by artists.

Two miles from Twyford, to the west, is the lovely riverside village of Sonning. Its beautiful reaches, woods, and meadows, its graceful bridge of arches, and its magnificent old church, make it worth a holiday in itself. Holman Hunt lives here. The old-world Bull, the White Hart, and the French Horn are three good hotels, the two latter on the banks of the Thames. There are some charming old-fashioned cottages here.

Two miles north of Twyford is another beauty spot—Wargrave—which

unfortunately, is being much modernised, but the old part is at present untouched. There is another grand old church here. The Thames is the attraction; the Wargrave backwater is a delight to the photographer. Wargrave is only three miles from Henley-on-Thames, and the scenery by road or river is very fine. The hotels are the George and Dragon on the river, with a signboard painted by an R.A., the White Hart, the Greyhound, and the Bull. All may be recommended. Photographic supplies may be obtained at the Post Office, and there is a dark room at Mr. Hayward's, a professional photographer. Apartments are plentiful.

The photographer would be well repaid for a visit to this district, and with a cycle all the places named are within a quarter of an hour's ride of each other; but, unfortunately, there is a dearth of dark rooms.—A. T. D. GARDINER.

PENZANCE.

Reply to T.F.G.S.

There is a great variety of photographic work to be done in Penzance, the thriving town which forms the extreme end of the Great Western Railway. Steamers from Dublin and London call there, and form a pleasant means of getting to Cornwall for those who are good sailors.

At the end of a ten-mile drive, through country which is interesting the whole way, Land's End is reached, with some of the finest cliff scenery in the whole of the British Islands. In the opposite direction there is within easy walking distance St. Michael's Mount, the ancestral home of Lord St. Levan, open to visitors daily from April to September. Excursions may be made to St. Ives and to the Lizard, where more of the most impressive cliff scenery is to be found. In fact, all along the Cornish coast the headlands are of the boldest and most striking character imaginable, and the bays most attractive.

A mile and a half from Penzance is the fishing village of Newlyn, the home of a colony of artists who have made "the Newlyn school" famous. This is the place for the photographer who has a leaning towards genre or figure studies. He must make friends with the bronzed and bearded fishermen. Here will he get "Baiting the Lines," "Mending the Nets," and countless other subjects of a like kind. The little harbour has its limpid water crowded with the fishing craft, with their sails of a rich pleasing brown.

Lodgings and hotel accommodation are plentiful, at prices ranging from 12s. 6d. per week. August is the time when Penzance is fullest. Plates and other photographic materials can be obtained from Mr. Preston, 48, Market Place, and Mr. Carter, 27, Market Place, and from Mr. A. H. Buckett, of 22, Market Place. No mention of the attractions of Penzance would be complete which did not refer to the Scilly Isles, to which a steamer plies three times a week, oftener in summer, covering the distance in from three to four hours.



Dealing with its contents from the user's point of view, telling how to buy, how to recognise, how to keep and how to use the various preparations employed in the commoner photographic processes.

LEAD NITRATE.

Lead nitrate, or nitrate of lead, is a poisonous salt, usually met with in the form of heavy white opaque crystals, which keep indefinitely in the dry form or in solution. It is not likely to be too impure for use for photographic purposes.

Its sole employment by the photographer is in the lead intensifier—a solution which gives a very great increase of density. So great, in fact, is it that the process is seldom used, except for black and white work on collodion negatives.

FORMULA.

Lead nitrate	...	...	...	20 grains
Potassium ferricyanide	...	...	...	30 "
Acetic acid	...	...	...	10 minims
Water	...	...	...	1 ounce

The negative is left in this until it is bleached, and is then placed for half a minute in five per cent. nitric acid, and is then washed in several changes of water. It is blackened in—

Ammonium sulphide	...	...	...	$\frac{1}{2}$ dram
Water	...	...	...	2 ounces

Instead of this the sodium sulphide solution employed in toning bromide prints may be used if preferred.

MAGNESIUM.

Magnesium is a metal which burns very readily, giving a most powerful light, and is therefore very useful for photography at night, underground, or in other dark places. There is no likelihood that the metal as bought will not be good enough for all photographic purposes. Magnesium keeps indefinitely. In powder form it should be stored in a well-corked bottle, and it is all the better for being spread out on a clean plate and dried in the oven before use; but this must only be done with the plain powdered metal, and *not with a flash powder*, which under such circumstances might cause a dangerous explosion. The ribbon also should be drawn between the folds of a piece of glass paper just before use, to remove the layer of oxide with which it is coated, and leave the bright metal showing. It will then burn much more evenly.

Flash lamps are arrangements for blowing the powdered magnesium through a flame, and are only to be used with the powdered metal, and not with "flash powders."

The preparation of flash powders is a dangerous operation, as they are all more or less explosive. The formula below is a simple one, and may be prepared with as little risk as any. The chlorate must be powdered by itself, by rolling it with a wooden roller; and should then be spread out on a sheet of cardboard and dried by gentle heat in an oven, the fire of which is going out. The magnesium is dried in the same way, and the two are mixed together with a card. Only a few grains at a time should be made.

FORMULA.

Flash Powder.

Magnesium	...	...	...	6 grains
Potassium chlorate	...	...	...	10 "

MEDIUM, RETOUCHING.

Although not what is commonly understood by a chemical, retouching medium should find a place on the shelves of the photographer who ever has occasion to try and improve his

negatives by the addition of pencil work. The medium is really a kind of varnish, which dries with a slight tooth, so that the pencil used on it will leave a mark. There are excellent retouching mediums on the market, so that there is nothing to be gained, but trouble, by attempting to make it. We give a formula in case it should be unattainable when wanted.

Retouching medium is applied to a negative only on those parts which need any retouching. A drop is put on the finger and rubbed on the film, with a circular motion, until it begins to feel tacky. It is then left for a few minutes to dry, and will be ready for the pencil.

FORMULA.

Retouching Medium.

Resin	...	...	...	300 grains
Gum dammar	...	...	...	70 "
Turpentine	...	...	...	4 ounces
<i>or</i>				
Pale resin	...	...	...	1 ounce
Turpentine	...	...	...	1 "
Oil of lavender	...	...	...	2 ounces

MERCURIC BROMIDE.

This salt is not generally found, as such, on the shelves of the photographer, but it exists in a solution which is often used for intensification, and is, by many, preferred to mercuric chloride. The solution is very poisonous. It keeps indefinitely.

There is no need to describe its use at length. We give below the formula for a solution which contains mercuric bromide. It is employed precisely in the same way as the solution of mercuric chloride, to be described hereafter, bleaching the negative with it, and then blackening with a suitable agent.

FORMULA.

Mercuric chloride	...	...	...	100 grains
Potassium bromide	...	...	...	100 "
Water	...	...	...	10 ounces

Packing Exposed Plates.

IN repacking exposed plates, nothing should be allowed to come into contact with their films, except right at the edges, unless it is the film of another plate. They may be placed film to film in pairs, the dozen then wrapped up in a couple of pieces of the opaque paper in which they were originally packed, and then put back in the box. The box itself should then be wrapped up in a third piece of opaque paper, gummed down, and its contents written on the outside. In this way plates will generally travel a long way without any injury. An additional safeguard will be found to be Wheeler's separators—little thin cardboard frames, which are supplied in boxes of fifty. One of these little frames is slipped between each pair of plates, and keeps their films apart just enough to prevent any mechanical injury should a speck of dust be enclosed between them. The frames, if taken care of, last quite indefinitely.



The Rajar Collodio-Chloride Printing-out Paper.

THE latest addition to the list of photographic apparatus and material manufactured by Messrs. Rajar (1907), Ltd., of Mobberley, Cheshire, is a collodio-chloride P.O.P., which is made in two grades, glossy and matt, both of which we have recently had an opportunity of trying.

The glossy paper yields with great ease and convenience of working prints of a fine rich colour from brown to deep purple, the toning bath recommended being a sulphocyanide one of the simple composition—

Ammonium sulphocyanide	... ..	21 grains
Water	... ..	25 ounces

to which four grains of gold chloride dissolved in a little water are added before use. The toning should be carried on until the prints appear purple on looking through them, and are then washed and fixed in hypo of a strength of two ounces to the pint. The usual washing to remove the hypo completes the operations.

The matt paper may be treated in the same way, and, like the glossy, will then yield prints of a rich purple. But a fine sepia black can also be obtained on this paper by toning first with gold and then with platinum. To do this, the prints after well washing are placed until they just begin to tone in—

Sodium acetate	... ..	100 grains
Water	... ..	20 ounces
Gold chloride	... ..	2½ grains

This bath keeps well, as old photographers who have used albumenised papers in the past will know; and it should be made up some hours before it is required. The merest commencement of the toning having been got in the acetate-gold bath, the prints are washed and put in the following platinum toning solution:

Citric acid	... ..	150 grains
Water	... ..	20 ounces
Potassium chloroplatinite	... ..	10 grains

This, too, should be mixed up a few hours before it is required; and, if preferred, 120 minims of phosphoric acid (s.g. 1.12) may be substituted for the citric acid. The prints are toned in this until the shadows, on looking through them, are quite black, and are then fixed in hypo of a strength of one ounce to the pint, and washed in the usual way.

The Rajar collodio-chloride paper we found to be an excellent product in every way. For portrait work, the glossy variety and the sulphocyanide bath will no doubt be preferred by many; but for work of artistic aims, and particularly for landscape and similar subjects, the double toning of the matt paper we can strongly commend.

Improvements in the Welborne Piper Photographers' Stop Clock.

TIME plays a very large part in photography to-day. Not only is the exposure of the plate timed, but the extent of development, and very often of fixing, of toning, and other operations is controlled by time. Anything, therefore, which helps us to time the different processes with a minimum of inaccuracy and inconvenience, is welcome. The most comprehensive of the various devices which have been put forward for any such purpose is the Welborne Piper Photographers' Stop Clock, which has been entirely remodelled this year, and is shown in the illustration.

The clock is primarily an ordinary timepiece, which can be made to strike the hours or not at will, and is also available as an alarm. The pamphlet which is issued with it points out that by means of its photographic attachment it can be made (1) to time any kind of operation in light or darkness by sound, (2) to time exposures in combination with a shutter, (3) automatically to terminate a long time exposure, and (4) automatically to make an instantaneous exposure at any pre-arranged time.

The methods of using the clock are so numerous that anything like a detailed account of them here would be out of the question, but we may point out one of the most novel features of the new pattern. The knob P is at the end of a rod which has its lower end attached to a piston in a pneumatic cylinder. The rod is pressed downwards by a strong spring, but it can be drawn up and held by a catch until liberated by the clock itself at any time for which it may have been set. If the cylinder is connected with a pneumatic shutter by means of a rubber tube, the descent of the piston will either liberate the shutter and so make an "instantaneous" exposure, or will close it if it has already been opened and set to "time." At the same moment the clock stops, and so records the time at which the exposure has been made.

This is only one of the many purposes to which this very ingenious piece of apparatus can be put. There are a whole host of others to which it lends itself with almost equal readiness; in fact, it is difficult to think of a

timing operation for which it will not be helpful. These are all found described in the pamphlet upon it, which can be obtained on application to the makers, Messrs. W. Butcher and Sons, Ltd., of Camera House, Farringdon Avenue, London, E.C., and this should be consulted. The price of



the clock complete, with a long length of tubing and a pneumatic ball, is 42s. It is a valuable addition to any dark room.



WITH so many special appliances for the photographer who wishes to carry an ample supply of plates about with him, less is heard of the changing bag than used to be the case. Yet if the expense and weight of dark slides is a consideration, as it is with a great many, the changing bag ought not to be lost sight of. One of the easiest and most economical methods of carrying plates for the day's exposures is to have them in light-tight grooved plate boxes, and to use a single dark slide and a changing bag; while for magazine cameras, a duplicate set of sheaths and a couple of cardboard boxes to hold them are equally effective.

Changing bags may be divided into two kinds—those which are provided with eye holes, so that the photographer can see what he is about, and those which are not. The latter are very much simpler to make, and in actual use are quite as handy as the former, as the "seeing" is at best a poor affair, and should really not be necessary. The writer has used both, but the simpler form is what he prefers on all grounds, and is that which will be described below.

The size of the bag must be governed by the size of the plates in use and the work that is to be done in it. A very small one will suffice when it is merely a case of putting quarter or 5×4 plates into a single slide; a much bigger one will be a necessity, even for quarter-plates, if the camera is of the magazine type, and has to go into the bag to have its plates changed. These are things which the photographer must settle for himself, after a careful consideration of the use to which he proposes to put the bag.

The changing bag which has proved its usefulness in my hands for many years was originally made to take a half-



plate single dark slide, of what is known as the wet-plate pattern. This is a slide with a hinged door at the back, so that the plate can be put into it either vertically or horizontally, as the subject may require. A light-tight cloth-covered cardboard box with metal grooves, arranged to hold a dozen plates, was used with it, and many hundreds of plates have been changed in it without a hitch of any kind. It was made of black sateen or merino, I forget which, but a soft black material at any rate, fairly opaque in character, the whole of the materials coming to something less than five shillings.

The first proceeding was to make three separate bags, like pillow cases, just sufficiently different in size to enable them to slip one inside the other. The outer bag, when laid flat

on the table, I find measures 29in. × 17in. One end of each bag is closed and the other end open. Near the closed end of each bag, on one side of it, as shown in the sketch, is attached a sleeve of the same material, 9in. long, and just large enough to pass easily over the hand. When the three bags have been made, they are placed one inside the other, and are stitched together at the mouth of the bag and at the end of the sleeve, and nowhere else. This is important, as we must have no pin or needle holes going through any two of the bags in the same place. The sleeve is fitted with an elastic to close round the wrist, and the mouth of the bag is doubled over and provided with cords, by which it can be closed in the same way. The sketch should make the arrangement quite clear.

This bag is used in the following way: It is laid down on as level a surface as can be found—a table, a grass plot, or even a tomb has served. Inside it are placed all the things which are required for the changing, and then the open end, by means of the cords, is drawn round the wrist of the left hand. The gathered up ends of the bag are all tucked into the coat sleeve, to ensure against the accidental admission of any light. When this has been done with the right hand—it is better still if a friend will do it, as two hands are a convenience in a job of that sort—it is inserted in the sleeve, and the changing is put in hand forthwith.

A bag, in which the open end was doubled over and buttoned, used to be used, with two sleeves for the hands; but of the two arrangements, that one which has just been described seems to be the better. Certainly it does not seem to leave anything much to be desired, and the buttoned-over flaps are not so easily made light-tight.

When such a bag is to be used with a camera which takes plates in sheaths, the most convenient plan is to have a duplicate set of sheaths, and to carry these all ready loaded with plates, so that nothing has to be done in the bag, beyond taking one lot of sheaths out of the camera, putting the fresh ones in, placing those which were taken out in the box, and closing this. A series of three boxes, fitting one inside the other, may be constructed of cardboard, the corners glued and strengthened by strips of the black material of which the bag was made. A dozen sheaths in such a box will take up very little room. The box may be rolled up in the changing bag itself, and forms a capital reserve.

The changing bag is pre-eminently a piece of apparatus that can be made at home, and that may be under such conditions as good as, if not better than, the bought article. Not only can the bag be used for changing, it will be invaluable if any automatic hand camera or changing box should go out of order or jam. The whole thing can be put into the bag, and made to work, generally, in a minute or so. Considering the little it costs and its usefulness, it is surprising more is not heard of it.

THE PHOTOGRAPHIC ANNUAL is the new title given to "The Figures, Facts, and Formulae of Photography," of which it forms the—considerably enlarged—fourth edition. It is, as its old name implied, a collection of formulae and instructions for the different photographic processes, contains a comprehensive glossary of photographic terms, and should prove a useful work of reference. The publishers are Messrs. Dawbarn and Ward, Ltd., and the price 1s. nett. It can be obtained, post free, from the publishers of *Photography and Focus*, price 1s. 4d.

Correspondence

For the free discussion of all matters of general interest to Photographers

The Editor is not responsible for the opinions of his correspondents.

THE ALUM BATH FOR P.O.P.

Sir,—There is no doubt a distinct change of colour in the case of alumed self-toning prints, and the same action frequently occurs when ordinary P.O.P. is used. The action, however, differs very much, as in many cases the altered colour is an advantage. It is generally the prints from thin negatives which go lighter, whilst prints from suitable negatives often assume a colder tone.

It will also be noticed that the action of the alum bath differs very much with various brands of papers, and it is rather surprising that this peculiarity has not been more commented on. Mr. Ballard's advice concerning the alum bath is good, and, if properly used, we think nothing beats it.

Yours, etc.,

THE HALIFAX PHOTOGRAPHIC CO.

CURIOUS RESULT OF DOUBLE EXPOSURE.

Sir,—I send you herewith two prints from negatives taken by me at Glendalough, Co. Wicklow, this week. One of



them is a normal picture, and the other is a rather striking example of the result of taking two pictures on one film.



It is very curious that the island should have fitted in so harmoniously. I have not retouched the negative in any way.

Yours, etc.,

LOUIS C. DORAN.

WASHING PLATES BY FLOATING.

Sir,—I was very interested in the article on "Photography in an Ordinary Room" in your issue of June 20th (page 138), as I have used the "cork clip method" of washing prints for some time past.

Your readers may like to know that this method is equally useful for washing plates. If the clips are cut from the usual size wine bottle (or, for abstainers, ginger ale bottle) cork, three of them clipped on one end of a quarter-plate will be found to float it just under the surface of the water. An ordinary domestic pail, filled to the brim, is a suitable vessel to use. I rinse each plate slightly under the tap before and after floating in the pail for an hour, and find this a very effective and easy way out of a somewhat monotonous job.

Yours, etc.,

THOS. M. PARKER.

TONING DIFFICULTIES.

Sir,—Mr. Philip N. Williams's letter in your issue published last week contains useful hints, but I do not agree with him that it is more economical to save up a batch of ten prints before toning. If a bath of, say—

Ammonium sulphocyanide	... ..	30 grains
Gold chloride	... ..	3 grains
Water	... ..	6 ounces

is made up as a stock solution (it will keep good for months in a dark bottle), as few as two prints can be toned by taking—

Stock solution	... ..	2½ drachms
Water	... ..	2 ounces

or, as a matter of fact, one print could be toned by using half this quantity.

My experience with combined baths differs from that of Mr. Williams, and the bath I use now will, I think, give equally as good tones as any single bath made. Will your correspondent send me an untuned dark print, and I will return it to him, finished for comparison?

Yours, etc.,

PERCY HIND.

Ivydene, Orchard Street, Walthamstow, N.E.

GREEN LIGHT FOR DEVELOPING: WASHING NEGATIVES: PRICES IN ADVERTISEMENTS.

Sir,—In a recent issue of *Photography and Focus*, under the heading of "A Safe Light for Developing Autochrome Plates," you have a note on the use of coloured papers of yellow and green for the dark room lantern.

I have used in a very common or garden lamp, one each of green and orange glasses, with rapid orthochromatic plates, as well as with special rapid plates, and have never had a plate fogged by the dark room light. If I remember rightly, I got the idea from an article some long time ago by Abney in, I think, *Photography*. The light is very white, and from my experience, is also very safe.

I wash my plates after fixing by wiring two sticks to one side of my plate rack, and insert the plates film side down, and hang them thus in an enamelled house pail (covered with a wooden top to keep out dust). The hypo falls to the bottom of the water during the night (I can only develop after surgery hours), and in the morning I give a short rinse under the tap, to wash off any precipitate, and place them to dry. I mostly wipe the water off the glass side and put the negatives into methylated spirit for five minutes, and then swab over the film with absorbent wool before placing them to dry in a draught of air. They are ready to print in less than two hours.

I won't inflict myself more on you, but I do ask why, oh why! do not all your advertisers mention the price of their goods? I have written more than once for prices, only to find that they were more than I can afford. I should have saved time and stamps had the prices been mentioned. I am not "flash"—country doctors seldom are.

Yours, etc.,

DR. SUFFOLK.

Midnight Photography in the Far North.



A reader in the Isle of Skye, Mr. Gerald S. Hoole, sends us this very interesting example of midnight photography. He writes: "I took it at midnight on May 28th. It shows very clearly the all night glow of the sunset merging into dawn, as it does here at this time of year. The hill in the centre is about due north, and is distant eight miles. The exposure was from 11.30 p.m. to 12.25 a.m., the plate used being the 'Imperial Special Rapid.'"

Success in Mercurial Intensification.

EVERYONE who has had much experience of mercurial intensification knows that it is a process which is often accompanied by certain drawbacks. The intensified negative frequently has a veil of fog all over it, which certainly was not perceptible before intensification, and it very frequently happens that negatives which have been intensified have subsequently altered in appearance, getting yellow or brown in the clearer portions, sometimes to such an extent as to be useless for printing.

These facts have been investigated recently by Professor Namias, who has been seeking a means of preventing them. This, he states, he has found in the use of a very dilute bath of nitric acid between the bleaching and the blackening. It is well known that when a negative has been bleached in mercuric chloride solution, no amount of mere washing in water will get rid of the mercury in the gelatine. This was first shown by Mr. Haddon in an important paper which he published some years ago in *Photography*. The result of this trace of mercury is that if the blackening is done with a solution of sulphite, the mercuric compound in the gelatine is at once decomposed and forms the veil or fog already referred to. This does not happen when ammonia is the blackening agent, but in such a case the mercury remains to pass gradually into a brown stain with the action of light

or the lapse of time. Mr. Haddon's remedy was to give the negative, after bleaching and before blackening, three or four baths of dilute hydrochloric acid.

The method of intensification recommended by Professor Namias, therefore, is first to wash the negative very thoroughly to make sure that it is quite free from hypo. Then to bleach it in a solution of ten grains of mercuric chloride to the ounce of water, to which five minims of pure hydrochloric acid have been added. The plate is then washed and placed in a bath of one dram of nitric acid in twelve ounces of water, in which it is left for two or three minutes. It is then rinsed and blackened either in ammonia (one dram of .880 to 3 ounces of water) or in a 5% solution of sodium sulphite. Finally, it is washed and dried.

Plates that have been treated in this way, says Professor Namias, will be found to be free from the fog already referred to, and will not alter under the action of light.

There is one drawback which seems to be inseparable from all these methods for getting rid of the last trace of mercury in the gelatine, and that is that they all involve the use of acid baths; and acid baths have a great tendency to soften the film of the negative and so to give rise to frilling. For this reason, therefore, it is well never to omit either an album or a formaline hardening bath before the intensification.



HUB.

BEVERLEY MINSTER: NORTH AISLE OF THE CHOIR (SEE PAGE 220).

Reliable



IMPERIAL PLATES have proved time after time their absolute reliability, and have gained a hold on the confidence of the public which becomes stronger every year.

In working with plates having such a reputation, one has that delightful "sense of safety" which is inseparably associated with the Imperial name.

BUSINESS NOTICES.

OFFICES.—20, Tudor Street, London, E.C. Telegrams: "Cyclist, London." Telephone: 5610 and 5611, Holborn.

PUBLISHING DATE.—PHOTOGRAPHY AND FOCUS is on sale throughout the United Kingdom every Tuesday morning.

SUBSCRIPTION.—PHOTOGRAPHY AND FOCUS will be forwarded regularly at the following rates: GREAT BRITAIN. ABROAD.

	s.	d.		s.	d.
Twelve Months	6	6	Twelve Months	10	10
Six Months	3	3	Six Months	5	5
Three Months	1	8	Three Months	2	9
Single Copy	1	1	Single Copy	2	1

REMITTANCE.—Postal Orders, Cheques, etc., should be crossed and made payable to Iliffe and Sons Limited.

ADVERTISEMENTS.—All communications on advertisement matters should be addressed—The Advertisement Manager, PHOTOGRAPHY AND FOCUS, 20, Tudor Street, London, E.C. All copy for displayed advertisements for the issue of any particular week must reach Tudor Street by the first post on Monday morning in the week previous.

PREPAID ADVERTISEMENTS.

SALE AND EXCHANGE (for Amateurs only).—1d. per word, minimum 9d.

PROFESSIONAL AND TRADE.—Three words 2d., minimum 1/-.

All advertisements to be inserted on these terms must be accompanied with remittance. To ensure insertion, letters should be posted in time to reach the offices, 20, Tudor Street, E.C., not later than first post on Wednesday.

BOX NUMBERS.—For the convenience of advertisers, letters may be addressed to numbers at the office of the paper. When this is desired, 2d. will be charged for registration, and three stamped and addressed envelopes must be sent for forwarding replies. Only the number will appear in the advertisement. Replies should be addressed, "No. 000, c/o PHOTOGRAPHY AND FOCUS, 20, Tudor Street, London, E.C."

DEPOSIT SYSTEM.—Persons who hesitate to send money to unknown persons may deal in perfect safety by availing themselves of our Deposit System. If the money be deposited with PHOTOGRAPHY AND FOCUS both parties are advised of this receipt, and upon intimation of the arrival and acceptance of the goods, the money is forwarded, less a charge of 1/- for registration. The time allowed for a decision after receipt of the goods is three days. For all transactions exceeding £10 in value, a deposit fee of 2s. 6d. is charged. Cheques and money orders should be made payable to the Proprietors, Messrs. Iliffe & Sons Limited, and addressed to them at Coventry.

PUBLISHING NOTICE.—Communications for the Publishers should be addressed, Iliffe & Sons Limited, 20, Tudor Street, London, E.C.

EDITORIAL NOTICES.

ADDRESS.—All communications for the Editor should be addressed: The Editor, PHOTOGRAPHY AND FOCUS, 20, Tudor Street, London, E.C.

TO CONTRIBUTORS.—The Editor will be glad to consider original up-to-date manuscripts on photographic subjects. All contributions must be typewritten, or in very legible handwriting, on one side of the paper only, and should bear the name and address of the sender. Letters or communications arising out of matters already appearing in the paper are not paid for. The Editor disclaims legal responsibility for the safety of matter submitted to him, but he will endeavour to return rejected manuscripts, etc., when a stamped addressed envelope is enclosed for that purpose. No notice whatever can be paid to communications without the name and address of the sender, not necessarily for publication.

PRINTS FOR CRITICISM.—Readers sending prints for criticism or advice are notified that in all cases it is understood that by so doing permission is given for their reproduction, without fee, in PHOTOGRAPHY AND FOCUS.

PRINTS FOR REPRODUCTION.—Reproduction fees are only paid by arrangement beforehand. The sending of a print, without any condition stated, will be taken as permission to reproduce it without fee. The Editor will be glad to consider for publication, with or without letterpress, photographs of special interest, on terms to be arranged.

PAYMENTS.—Articles and illustrations are paid for on acceptance.

INTERVIEWS.—The Editor will be at 20, Tudor Street, on Wednesdays, between the hours of 9.30 and 11.30 a.m., but can only be seen at other times by appointment.



THE HARPER STEREOSCOPIC UNION has vacancies for stereoscopic workers. Particulars can be obtained from the secretary, Mr. G. A. Geary, 33, Brereton Road, Bedford.

A SANDERSON MISSING. Mr. T. C. Cox, of 67, Robson Street, Everton, Liverpool, reports that on June 29th he left his quarter-plate regular Sanderson and accessories in a leather sling bag in the train between Plymouth and Totnes. A reward will be given to any reader who is instrumental in recovering this property.

OUR CRITICS. One of the Brussels newspapers during Convention week contained the following paragraph: "Those funny foreigners! Have you seen them—the English and the Americans on the Continent—annexing the whole of a railway compartment as though it were a Transvaal or an Orange Free State?"

Books for . . . Photographers.

Photography for All.

By W. JEROME HARRISON, F.C.S.
Covers the whole ground of photography as practised in its most popular forms.
Cloth Bound 1/- nett. Post free 1/2.

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By G. T. HARRIS, F.R.P.S.
All the different processes described at first hand by a practical slide maker.
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Dealing with modern hand cameras of all types and giving instructions for all forms of photographic work involving the use of a hand camera.
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A complete, practical, concise and well written treatise on what is the finest of the printing methods of pure photography, with facsimile developed and undeveloped platinum print.
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To hand camera workers and the users of small cameras generally the book will be found invaluable.
Cloth Bound 1/- nett. Post free 1/2.

A full list sent on receipt of a postcard.
ILIFFE & SONS LTD.,
20, TUDOR ST., LONDON, E.C.

THE YORKSHIRE PHOTOGRAPHIC UNION has issued its handbook, list of lectures, etc., for 1908-9.

THE BLACKPOOL TOWN COUNCIL is organising a competition for photographs for use in the next issue of the official guide.

VELOX DEMONSTRATIONS. Messrs. Kodak, Ltd., inform us that they are now in a position to arrange with photographic societies for a demonstration during the coming session, by Mr. W. F. Slater, on the subject of "The Printing, Developing, and Toning Velox."

THE SALON ENTRY FORM has been issued, and can be obtained on application to the honorary secretary of the Photographic Salon, 5a, Pall Mall East, London, S.W. The receiving day is Monday, August 31st.

MODIFICATIONS OF THE DEVELOPER. Demonstrating on this subject at the Nelson Camera Club, Mr. F. Hartley said that in his experience a few drops of a solution of potassium bichromate added, with bromide, to an M.Q. developer, helped considerably with an under-exposed plate, or with one in which the subject was contrasty. On the other hand, he said a few drops of a solution of potassium ferri-cyanide, with bromide, helped in the successful development of an over-exposed plate.

THE CHALLENGE COMPETITION FOR JUNE has resulted in the first prize (£25) for the best self-toning P.O.P. print being taken by Miss J. E. How, High Road, Lee, S.E., the dealer supplying the paper being Mr. Palmer, of High Road, Lee. The second prize of £3 for the best gaslight postcard was won by Mr. Collier, Leam, Stoke-on-Trent, on cards supplied by Mr. Lowndes, Cheadle. Each of these dealers, therefore, receives goods to the value of 10s. The new Challenge competition closes October 31st, and has for its first prize a high-grade bicycle, for its second a half-plate camera, while the third and fourth are 20s. and 10s. respectively. The prints must be on the Challenge papers.

AT THE SHEFFIELD PHOTOGRAPHIC SOCIETY'S annual meeting the following officers were elected: President, J. W. Wright (past honorary secretary); vice-presidents, J. W. W. Charlesworth, J. R. Wigfull, and G. Tomlinson; treasurer, T. G. Hibbert; reporter, T. W. Jury; lanternist, W. H. Stubbs; council, J. A. George, H. Hill, G. E. Noble, H. S. Nutt, G. A. Seed, T. U. Simonson, J. Taylor, F. A. Tinker, Dr. W. H. Helm, and Dr. H. G. Paterson; exhibition committee, J. W. Gallimore, A. Turner, and G. Walton, Miss F. Ashton, Mrs. J. W. Charlesworth, Miss A. E. Jago, and Miss E. H. Tillotson; delegates to the Yorkshire Photographic Union, J. W. Charlesworth, J. W. Wright, and J. R. Wigfull; delegates to the Affiliation, G. Tomlinson and J. W. Wright; honorary secretary, Henry Merrill, 34, Harbord Road, Woodseats.

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VERY CAREFULLY.

THERE ARE NO BOX
FORM CAMERAS
SO DESERVEDLY
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The "Klito" Hand Camera is the most popular magazine plate camera in the world.

Tens of thousands have been sold and the demand is as big as ever.

There must be a reason for this continued popularity, and you will do well to look at a "Klito" before you purchase a new camera.

Look at the finish, the simplicity of the movements, test the reliability of the changing movement with a dozen plates, note the range of speeds on the shutter, and observe also that you can always **adjust** these speeds so that you can keep the shutter up to the mark.

Note too that the "Klito" is British; built in London and made entirely of wood, and well made too with all the joints clamped. That's the secret of the "Klito's" popularity.

Let us send you (free) an illustrated catalogue of the cameras we make and your dealer sells. A postcard will do to make the application on.

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**All
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SYMMETRICAL LENS F/8 . . . 25/-



REPLIES TO CORRESPONDENTS.

Queries are dealt with in strict rotation in the order received. Only "Urgent Apparatus" queries will be dealt with by post, for which purpose a stamped envelope must be enclosed.



REGULATIONS.—(1) Envelopes must be marked "Query," and the "Enquiry Coupon" found elsewhere must be enclosed. (2) The full name and address in addition to a *nom-de-plume* must be given. (3) Only one question on one subject is allowed in each letter. (4) Prints may be sent for criticism, but a separate coupon must be sent with each print, and a stamped addressed envelope (not loose stamps) for their return.

REPLIES IN BRIEF.

YAXLEY (Clayton).—It is not against the rules.

F. W. BURTON (Folkestone).—Many thanks for your good wishes.

IODOSAL (Walthamstow).—The substance is sold under a trade name, and we have no information as to its nature.

W. S. SPEARING (Runcorn).—Report will be sent on receipt of stamped addressed envelope stating what it is sent for.

HORNSEA (Sheffield).—We have no report on Hornsea, but there is pleasant country inland, although without any very striking features.

E. D. BROWN (Malvern).—Strength one to twelve parts of water. Time, six minutes. It is not so suitable as the maker's formula, however.

CROMMY (Brompton).—There is no reason why the sheaths should not be used as suggested. A good washing will remove all trace of the hypo.

CHEMIST (Stretford).—The autumn is one of the best times for visiting the Lake District, except for the risk of bad weather. Ambleside is one of the best centres.

T. H. PETTIPHER (Chipping Norton).—We replied to you on page 133 of our issue for June 23rd, but did not retain the films or return them, as you did not ask us to do so.

P. A. HIND (Walthamstow).—We do not recognise the bath, and can find none in any of our reference books. It is generally understood that any such addition destroys the hardening property.

EAST ANGLIAN (Ipswich).—There is a dark room at Mr. J. A. Gardiner's, High Street, Ely, but we cannot say if it is open on Bank Holiday or not. It would be best to write him. We have not got a report from Ely at present.

S. I. EMANUEL (Borough).—The drying method is described in our correspondence columns this week. If the negative is printed on collodion paper the print can be blotted off and dried quickly before a fire.

A. R. BARTRUM (Putney).—Many thanks for your suggestion, which shall have our careful consideration. There are serious difficulties, but we will see if they can be overcome. Unfortunately, we have not the information for which you ask.

PAX (Ramsgate).—The combination clearly will not cover the whole of the plate. If the magnifier is as near the other lens as it can be got, there will be no help for it. Some part of the mount of one or the other is limiting the angle that can be included.

LANTERN (Repton) asks if there are any printing-out lantern plates on the market. He thinks the summer number "Top Hole," and that the advertisements alone were worth the id. A.—There used to be, but we have heard nothing of them for a long time now.

BEGINNER (Leeds).—All depends on the make of the camera. We should apply to the maker if you know who it is; if not, Messrs. Taylor, Taylor, and Hobson, Stoughton Street Works, Leicester, would probably be able to fit a Cooke lens in a focussing jacket to it.

K.P.A. (India).—The order of the four best would be K, F, G, C. It is not possible to arrange the whole lot in a series, but no doubt this will serve as a guide. Many thanks for your good wishes, and also for the information about the bookstalls, for which we are much obliged.

S.G.H. (Plymouth).—You are quite correct. The *f* number (near enough for all practical purposes) may be ascertained by dividing the distance which the ground glass is from the stop when the lens, or half lens as the case may be, is focussed for infinity, by the diameter of the stop itself.

R. HOGAN (Limerick).—The back combination of the Taylor, Taylor, and Hobson lens will answer excellently for the purpose; much better than any combination of lens and magnifier; but when the exposures must be as short as possible, we do not see much reason why either whole lens should not be used. Why not try?

R.L.W. (Old Kent Road) has had a lot of trouble from reflections of the sky in a shop window he is photographing. He has tried the blind up and down but it makes no difference, and asks how to avoid them. A.—As the reflection takes place on the front of the glass, manifestly nothing you can do with the blind can make any difference. The best plan we can suggest is to get the camera as high as you possibly can from the ground, standing in a van, or upstairs in a house opposite. If the lens is level with the top of the window or above it, you should have little trouble.

H. J. KEY (Bradworthy).—Criticism awaits stamped envelope.

WEIGHTS (Bradford).—1 is one-tenth, .2 is one-fifth, .5 is one-half.

DUNDEE (Dundee).—Criticism will be sent on receipt of stamped envelope.

A. J. MITCHELL (Aberdeen).—The volume ended May 5th, 1903. The question can hardly be reopened.

C.A.S. (Didsbury).—Report will be sent on receipt of stamped addressed envelope, if you state what the envelope is for.

G. M. STOTT (Flixton).—We have handed your letter over to our advertisement department, who will endeavour to do what you want.

O.D. (Birmingham).—Unless you sold them the exclusive rights, or they stipulated for them, you can sell another print to another paper.

SUNSET (Newport).—If you give two hundred times the exposure you would give on a fast plate without a screen, you could not be far wrong.

W. E. BLANCHARD (Liverpool).—It may be as you suggest, but the wax may be a bad sample. We should try standing the bottle in warm water for a minute or two.

IRELAND (South Woodford).—Many thanks for your good wishes. At present we regret we cannot make such a change as you suggest, although we realise its advantages.

C.R.H.P. (Leeds).—Messrs. Mawson and Swan, Newcastle-on-Tyne, supply stout films for this purpose, with full instructions for their use. A line to them would, no doubt, bring you all necessary particulars.

DARK SLIDE (Bo'ness).—Certainly it might, if the separators were a bad fit; but it would be at once apparent if it did, because the fog would start right at the edges and stream inwards. Does it do so?

T. WEBB (Southampton).—Do you alum the prints, and do you let them dry first, and then rewet and squeeze them? If not, we can quite understand their sticking. If you do, write us again with full particulars of your procedure, and we will try to help.

TYRÖ (Carlisle).—We use them, but the factorial method is not possible with them. There are no books specially on the subject. If you are a regular reader of the paper you will no doubt have gathered our views, which cannot be put forward in a column such as this.

X. (Cambridge).—No permission is necessary to photograph trains in motion, unless you have to trespass on the line, in which case you would either have to apply to the general manager, or use the friendly blindness of a station master. The best plan would be to select a stand point where you are not likely to be seen.

H. E. JONES (Bristol).—Take enough of your stock solution of sulphocyanide to give you fifteen grains, add to it thirty grains of common salt and two ounces of hypo, and dilute to make eight ounces. When all is dissolved, mix a dram of your stock solution of gold with two ounces of water and add it a little at a time.

GADHEAL (Stroud Green).—The apparatus named does not actually give the correct exposure, but affords a criterion from which it can be ascertained. We very much doubt if any such things are better than the unaided judgment. If the light is a constant one the exposure of gaslight or bromide papers can be mastered in a couple of hours.

T. MCLEOD (Birkenhead).—We do not know of a quarter-plate camera with extension enough to take a 15in. lens, but plenty of half-plate patterns will do so; and carriers can be used for quarter-plate. For special purposes these long foci are often used. We have been employing a 22in. lens on quarter-plates recently, but did not regard it as anything very much out of the way.

D. SCOTT (Westcliff-on-Sea).—Certainly nothing more would be brought out in one case than in the other. The plate might be fogged, and in consequence of the dilution there might be less chance of over-developing it; nothing more. Why not try the experiment, taking care not to over-develop the first, and to judge the results, not by looking at the negatives, but by comparing the prints they give?

J. MORLEY (Brixton).—We do not recommend any combined toning and fixing bath, but the following is a standard formula: Hypo 8 ounces, citric acid 20 grains, alum 200 grains, lead acetate 20 grains, hot water 30 ounces. The ingredients are dissolved in the order named, and the solution filtered when cold. One grain of gold chloride dissolved in a little water is added to 6 ounces of this solution to make the toning bath.

SUCCESS

We have tried to produce a Self-toning Paper which will give equal results to ordinary P.O.P., and that we have succeeded is proved by the fact that

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FEW MINUTES HYPO.

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Exquisite red to purple tones (a special feature of Estona). Four grades—Glossy, Silky, Matt, and Cream Crayon.

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BEGINNERS' COMPETITION.

Open to all photographers who have never taken an award.

PRIZES.

First Prize.—A signed copy of "The Complete Photographer," a half-guinea work by Mr. Child Bayley, now in its second edition.

Second Prize.—A free subscription to *Photography and Focus* for twelve months.

One or more certificates of honourable mention will also be awarded.

RULES.

(1) Each competitor can send as many prints as he likes, but each print must bear on the back the coupon, published each week, the name and address of the sender, the title of the picture, and no other writing whatsoever.

(2) No print will be eligible that is larger than 5½ in. x 3½ in. (postcard size) or 5 in. x 4 in.

(3) No print must be mounted.

(4) No handwork other than simple spotting is permitted on negative or print, nor shading or dodging of any kind. It is distinctly understood that entry in the competition implies a declaration by the competitor that this rule has been complied with: and in case of dispute the editor shall have the right to call for the negative, from which the entry purport to be a simple direct contact print.

(5) No prints will be returned, and no correspondence with regard to the competition can be undertaken.

(6) The publishers of *Photography and Focus* shall have the right to reproduce, without payment, any of the prints sent in, winning or otherwise. But except the winning prints, the names of competitors of other prints that may be reproduced will not be published without the competitor's consent.

(7) All entries must be addressed "Beginners' Competition," the Editor of *Photography and Focus*, 20, Tudor Street, London, E.C., and must be delivered at that address by the first post on the closing date at the very latest.

CLOSING DATE.—Friday, July 31st.

TITLE COMPETITION.

The picture for the current title competition will be found on page xxx. this week, and the rules and coupon on page xii.

Entries close July 31st.

SPECIAL SUBJECT COMPETITIONS. OPEN TO ALL READERS.

PRIZES.

First Prize.—"Photography" Plaque in Silver.

Second Prize.—"Photography" Plaque in Bronze.

Third Prize.—"Photography" Medal in Bronze.

One or more certificates will also be awarded.

RULES.

(1) The subject of each photograph entered must be that announced for the particular competition.

(2) Each competitor can send as many prints as he likes, but each print must bear on the back the name and address of the sender, the title of the picture, and no other writing whatsoever. Each print must have attached to it a coupon for the competition of the month, which will be found in each issue of the paper.

(3) No print must be mounted. No handwork other than simple spotting is permitted on negative or print, nor shading or dodging of any kind. It is distinctly understood that entry in the competition implies a declaration by the competitor that this rule has been complied with: and in case of dispute the editor shall have

the right to call for the original negative, from which the entry purports to be a simple direct contact print.

(4) No prints will be returned, and no correspondence with regard to the competition can be undertaken.

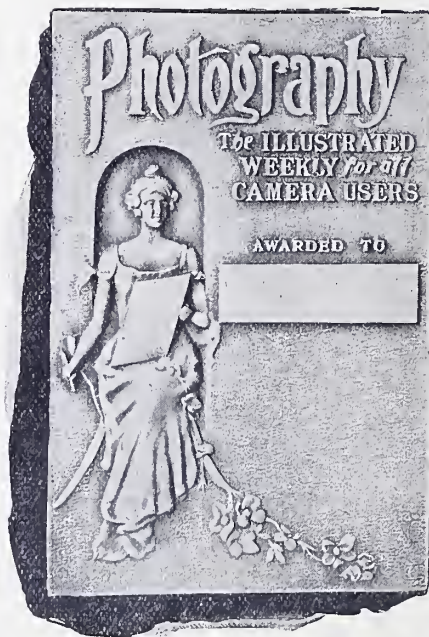
(5) The publishers of *Photography and Focus* shall have the right to reproduce, without payment, any of the prints sent in, winning or otherwise. But except the winning prints, the name of the senders of other prints that may be reproduced will not be published without the sender's consent.

(6) All entries must be addressed "Special Subject Competition," the Editor of *Photography and Focus*, 20, Tudor Street, London E.C., and must be delivered at that address by the first post on the closing date at the very latest.

SUBJECTS AND CLOSING DATES.

A Plant, or Flower, taken growing out of doors. Closes Friday July 31st.

A Harvest Scene. Closes Monday, August 31st.



ADVANCED WORKERS' PRIZE COMPETITION.

PRIZES.

First.—"Photography" Silver Plaque.

Second.—"Photography" Bronze Plaque.

Third.—"Photography" Bronze Medal.

One or more certificates of honourable mention will also be awarded.

RULES.

(1) All photographs must be sent addressed "Advanced Competition," the Editor of *Photography and Focus*, 20, Tudor Street, London, E.C., postage paid to reach there not later than the first post on the closing date, and must contain stamped addressed envelope or label (no loose stamps) if they are to be returned.

(2) Each photograph must be mounted but not framed. Prints in slip-in mounts are not eligible. Each must bear on the back the name and address of the sender and the title of the picture. No letter or other communications must be enclosed with the prints. Every print must be attached to its mount a coupon for the competition of the month, which will be found in each issue of the paper.

(3) Each photograph must be the work of the competitor as regards selection and arrangement of the subject, exposure and development of the negative, and printing development or toning, and mounting of the print.

(4) The prints which are accompanied by stamped envelopes or labels will be criticised by post, and the editor shall have the right to reproduce any of the prints winning or otherwise. The awards will be made a fortnight after the closing date.

(5) Awards may be increased or withheld at the absolute discretion of the judge, and in all cases of dispute the decision of the editor will be final.

(6) There is no restriction as to the eligibility, except as set forth in these rules; and except that the same negative must not be used more than once in the competition. That is to say, that a print from it once submitted, all further prints, however varied, are ineligible.

(7) Neither editor nor publishers of *Photography and Focus* shall be held in any way responsible for the safety of prints, or for their return to the competitors.

(8) The sending of a print to the competition will be regarded as a declaration that the effect that it is eligible under these rules; and that the competitor agrees thereto.

CLOSING DATE.—Friday, July 31st.

AN INCONTROVERTIBLE FACT.


It is an incontrovertible fact that when Coupons are sent to us for exchange they are almost invariably accompanied by a letter expressing appreciation of

Gem Plates, Papers, & Postcards

and gratitude for the introduction of them by means of the Coupon Scheme.

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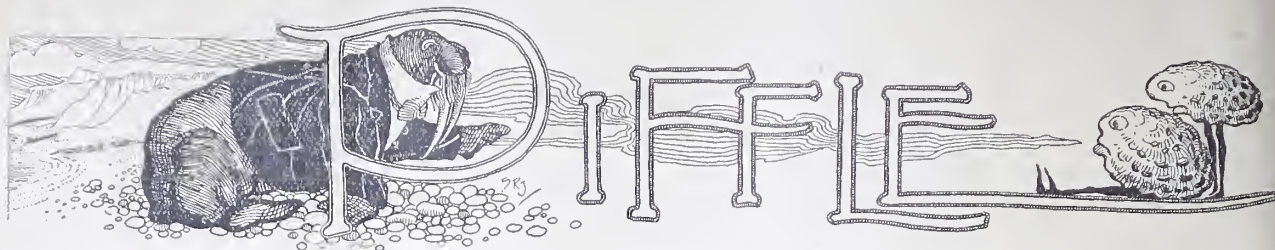
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"The time has come, the Walrus said, to talk of many things."

ONE of the American papers recently published an article on "Surgical Photography." Ever eager for the latest information I read it, expecting to find the usual accounts of the wonderful use of the X rays, by means of which it has been found possible even to locate a pint pot inadvertently swallowed by a thirsty bricklayer during the recent hot weather. Or it might perhaps contain directions for obtaining one of those dainty and pleasant kinematograph records of a surgical operation, showing exactly how some ghoulis old sawbones can hank off a chap's head and replace it by a better one while he waits.

* * *

But there was nothing of that sort in the article at all. The surgical photography was that applied mainly by the retoucher, and an important feature of it was the removal of superfluous flesh from the figures of those ladies whose portraits did not exactly conform to the demands of current fashion. Of course, the flesh is not actually removed from the lady herself in the same way that a butcher trims the fat off a chop, but the alteration is made by tinkering about on the negative with knife, scraper, pencil, and all sorts of weapons.

* * *

The fact that such things are constantly done was accidentally made public. There appeared in one of the illustrated papers a portrait of a lady intended as one of those types of beauty you see collected sometimes, and which inevitably give you an attack of blind staggers. Owing to an oversight the block was made from a proof that had been marked for alteration, and which showed clearly where the lady's hips were to be shaved off to. Any lady will tell you that you can't be a type of beauty just now with hips as wide as a barn door. Those hips went out of fashion years ago, and are hanging up in out of the way cupboards in thousands. But some hips don't come off, and that's where the surgical photographer steps in and takes them off on the negative or the print.

* * *

A photographer has to know a good deal nowadays. He really knows more than he ought, and far more than is good for him. He must be prepared to turn into a type of beauty any old thing that comes into his studio. She may have a face like a map of the east coast of England, and a figure like the fifth proposition of Euclid, but he blanches not. He knows he can pull it off all right, and that when he has finished with it her picture will find a place of honour amongst the nobby nymphs appearing weekly in the pages of "The Maiden's Mirror."

* * *

One thing the professional photographer must know to a nicety is the correct fashionable position, for the time being, of the waist. Those who have only a superficial knowledge of things are probably under the impression that any given lady's waist is always in the same place, just as her nose (bar accidents) keeps more or less in the medial line of her face.

* * *

No such thing. Ask any young man who knows what his arms were made for, and he will admit that from time to time he has reached for what he considered a familiar waist and found that he has missed it altogether, and that it has gone a foot or so higher or lower according as fashion has decreed.

* * *

Accordingly, when a professional photographer finds that some scraggy old type of beauty is wearing her waist in the wrong place he does not make a frantic attempt to shift it;

he makes a proof from the negative, marks on the print, "Put waist here," and hands the negative and print to the retoucher. He performs the surgical operation.

* * *

We have all seen those side view portraits taken against a light background. We have marvelled at the pure perfection of the profile, and admired the sinuously graceful outline of the throat and neck, and the sweeping lines of the rounded arms. We have perhaps wondered why we have never seen such absolute perfection in real life. The reason is simple.

* * *

It doesn't exist.

* * *

The photographic surgical operator digs it out.

* * *

That daintily chiselled nose came to him in the proof with a knob on the end, a kink in the middle, and a wart on the off side. The dimpled chin is all that he has preserved out of a series of four fat ones. The throat had about as graceful an outline as the skyline of a rhinoceros, and the rounded arms looked originally like a pair of drumsticks in an old stocking. I have read many touching stories of men who have caught sight of a portrait in a photographer's showcase and sworn a number nine oath there and then that they would seek the original through the wide wide world and wed her. They have always found her. In the story. Not in real life. They wouldn't know her in real life if they lived in the same house with her. If any of my male readers fall in love with a type of beauty on the strength of her photograph I advise them to bribe the retoucher to show them the original proof before he began his operations. There won't be any searching of the wide wide world then. They will take back their oath and swear themselves to eternal bachelordom instead.

* * *

As to the poor retoucher, let us drop a tear of pity for him. His is a rough job. With undaunted heart he faces the proofs and sees what it is he has to transform into types of beauty. He reads the instructions without a quiver. Move nose to the right as far as mark; trim down ears by two thirds; take out left eye and insert one looking the same way as the other; take off half the upper chin and turn the two lower ones into a neck ruff; amputate arms and put in new pair; supply bust; also shoulders free from collar bone; try to make the mouth look like a mouth; furnish eyebrows; remove all moles, warts, wrinkles, etc., etc., and make good; finish off and clean up generally; write in title "An English Belle"; wanted first thing to-morrow.

* * *

Poor surgical operator! Might we not spare him even two tears?

THE WALRUS.

SUBSCRIPTIONS.

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PHOTOGRAPHY. JULY 28TH, 1908.

PHOTOGRAPHY

A JOURNAL FOR EVERY CAMERA USER.

EDITED BY R. CHILD BAYLEY.

PUBLISHED WEEKLY.

JULY 28TH, 1908. TUESDAY. No. 1,029. Vol. XXVI.



OUT OF THE SURGE.

BY ARTHUR DOLDEN.

Awarded a Certificate in the Advanced Workers' Competition for June.



SPIRIT of the TIMES



Closing Dates of Competitions.

May we remind our readers that quite a number of our competitions will close in the next few days? Entries for the monthly "Beginners" and "Advanced Workers" competitions for July must reach 20, Tudor

Street, not later than by the first post on Friday morning next, July 31st.

At the same time, entries close for the "Special Subject" competition, the subject set being a plant or flower taken growing out of doors. Further special subject competitions which we have arranged are for a harvest scene and for a seaside scene respectively. Under the latter heading any beach picture would be eligible, and we would draw the attention of the thousands of our readers who will be having a seaside holiday in the next few weeks to the opportunities it should offer for getting entries. On Friday also entries will close for the "Title" competition, so that there are only a few days left for those who wish to try their skill at finding an appropriate title for Mr. Wastell's picture, which is reproduced this week on page xxx.

Paraffin.

By some strange mischance, the name "paraffin" has been applied, in this country at least, to petroleum or rock oil, which compels us to refer to the real "paraffin" of the chemist as "paraffin wax." Paraffin wax is a most useful substance to the photographer, if he only knew it; and it has quite a number of dark room applications. It can be purchased, under its own name, from the chemist; but for most photographic purposes it is sufficient to obtain some paraffin candles, which consist very largely of true "paraffin." The wax makes an excellent preservative for the dark room bench. It may be melted in a jam pot and applied while as hot as possible with a brush, and then, when the whole bench has been treated like this, a warm iron may be passed over it to smooth the coating. As paraffin is quite impervious to almost all photographic chemicals, such a coating, it may be well understood, is a very effective protection. Large dishes for

enlargements, etc., may be made of wood, and receive internally a coating of paraffin in the same way. Then, a sheet of American cloth being fitted as closely as possible to the interior of the dish, a warm iron passed over it will melt the paraffin and cement the cloth to the wood. Such dishes will last a long time, and when they begin to show a need of renewal the cloth is simply pulled off, and a new piece ironed down in its place. A little melted paraffin also makes a perfect air-tight seal for a bottle. Corks may be made airtight by being soaked in melted paraffin; and, indeed, there are quite a number of uses to which this handy wax may be applied.

Cloud Pictures at the Franco-British Exhibition.

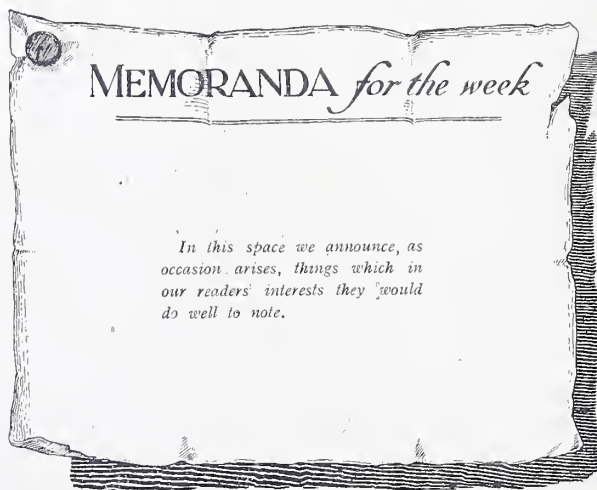
In its review of the photographic exhibits at Shepherd's Bush, "The Times" draws attention to the fine series of cloud photographs by Dr. Lockyer, Commander Wilson Barker, and Mr. A. W. Clayden, which are to be seen in the British Science Section, just inside the Wood Lane entrance. It observes that "the desire to make the cloud forms as clear as possible has led to unquestionable over-correction, the blue of the sky being in many cases rendered almost as black, against which background the clouds stand out with unnatural

solidity. The mistake, if it is a mistake, is at least one in the right direction." The cloud pictures referred to are certainly very fine records of the different types, and the inky background against which many of them stand out is well calculated to reveal their form and to impress it on the memory. Were these cloud pictures intended for use by combination printing with landscapes, for pictorial purposes, they would certainly be too strong in contrast to be satisfactory. The cloud forms would dominate all the rest of

the picture, and cause the landscape proper to play quite a secondary part. But for their present purpose it would be difficult to suggest any improvement.

Freshly-made Toning Baths.

One of the principal causes why toning baths keep so badly is that the water with which they are made up is impure. It may be good enough for drinking purposes, but it is not good enough for a toning bath. If a toning solution were made up with pure distilled water, and were kept pure, under conditions which only



a trained chemist could appreciate, it would keep in working order for a long time. But as soon as any prints were placed in it to tone, it would lose its purity, for the prints would have been washed, presumably, in impure water, and their pores would be full of it. The two most serious impurities from the point of view of a toning bath are iron particles and organic matter, mould, moss, spores, etc. The iron particles are due to the pipes through which the water reaches the photographer, and, if they are troublesome, can be excluded by passing the water through three or four layers of flannel tied over the tap. But organic matter seems unpreventable, and, being so, the wise photographer will only use freshly made up toning baths.

Buying Old-fashioned Stand Cameras.

A stand camera, if it has been properly used, does not deteriorate very rapidly; and those who are anxious to keep down their outlay on photographic apparatus may feel tempted to try and pick up an old stand camera on the cheap. We have nothing to say against such an attempt; but a word or two may put the photographer who thinks of making it on his guard. If the camera is one of a very old pattern, it has probably been designed to take lenses of the pre-anastigmat period. The rectilinear and symmetrical lenses of those days were—and are—very admirable instruments; but they had their limitations. The field of such lenses was never very much greater than the plate which they were made to cover, and it is very rare, therefore, to find a camera of that period provided with as great an extent of rise to the front as is often wanted nowadays. Our ideas of the capabilities of lenses have undergone expansion, and the photographer in 1908 thinks nothing of raising his front two or three inches as compared with perhaps an inch twenty years ago.

On the other hand, the old cameras are generally amply provided in the matter of a swing back. It was no uncommon thing to use such a stop as $f/64$, and the degree of swing that can be employed with so small an aperture as this is very remarkable. In buying an old camera, therefore, we would advise the prospective

customer to look to its capacity for raising the front. It may happen that, although the front cannot be moved very far in its present form, it is only a matter of lengthening the slot in which the screw travels. This alteration can easily be made. The whole tendency of modern work is to use the rising front instead of the swing back, and it is with this in view that the modern cameras are designed.

Joseph de Smythe has a second-hand "Klakk"—

A thing I should blush to possess;
There's a great deal of light filters in at the back—
The lens admits very much less.
But he uses it once in a twelvemonth or so,
And the rest of the family state
That's it's best to keep out of the pathway of Joe
When he starts to develop a plate.

Joseph de Smythe begins clearing the decks

Directly his dinner is done;
He commandeers soup-plates, and always expects
Of the kitchen and scullery the run.
The housekeeper's milk-jugs with hypo he fills,
And the mess he produces is great,
For he lets the taps run at their own splashy will
When he starts to develop a plate.

He turns out the gas and he pulls down the blinds,
And he always falls over the cat;
And his coat and his waistcoat are flung to the winds,
And the chairs are hurled this way and that.
The housemaid sheds tears and the cook has a fit,
And his father gets very irate;
But they don't worry Joseph—he cares not a whit
When he starts to develop a plate.

A sulphurous smoke-cloud envelops the scene,
And the chimney pots totter and fall;
The window panes crack, and the clock strikes thirteen,
And then, at the end of it all—
At something past midnight he lights up the gas,
Perspiring and damp, but elate,
And gloating with glee o'er a fogged bit of glass
That once on a time was a plate.



The Week's Meetings.

MONDAY, JULY 27TH.

Bradford P.S. Kirkstall Abbey.
Southampton C.C. "Art in Photography." C. Daw.
Bournville & D.P.S. Northfield.
Liverpool A.P.A. Ladbroke.

TUESDAY, JULY 28TH.

Nelson P.S. Affiliation (1907) Prints.
Nelson C.C. Holiday Prints
Birmingham P.S. Marston Green.
Bristol P.C. Business Meeting.
Paisley Philosophical Institution. Calder Glen.

WEDNESDAY, JULY 29TH.

Balham C.C. "Romantic in Landscape."
Devonport C.C. Tintagel.

WEDNESDAY, JULY 29TH (continued).

Leeds C.C. Founthay Park.

SATURDAY, AUGUST 1ST.

Glasgow Southern P.A. Gourcck.
Oliver Goldsmith P.S. Loughton.
Photo. Art Club (Aberdeen). Stonehaven.
South Suburban P.S. Gravesend and Cobham.
Wallasey A.P.S. Channel Cruise.
Halifax C.C. Meltham Woods.
Batley & D.P.S. Blubberhouses.

MONDAY, AUGUST 3RD.

Catford & Forest Hill P.S. Broadstairs.
North Middlesex P.S. Ware.
Windsor P.S.

Societies will have their meetings announced here if the syllabus is sent to us at the beginning of the Session, or from time to time



About Landscape Pictures.

The Photographic Treatment of Ordinary Open Country.

WHILE photographers of one kind are only happy if they can take their cameras into one of the recognised beauty spots of nature,

there are others who seem able to find occupation, and, what is more, pictures, in country which may be open and fertile and well wooded, but does not possess the more obvious charms which entitle it to the immortality of the railway company's advertisements and of the picture postcard. The question I should like to ask my readers in this article is whether it would not be more profitable and more pleasant, whether we should not get more direct personal satisfaction, by trying the open country, rather than by rephotographing for perhaps the five thousandth time one of the stock views which figure in the guide books.

However beautiful in themselves these combinations of rock and wood and water may be, they are often very disappointing in a photograph. Their beauty is very much a matter of colour, which is lost in the print. Even when it is not, the place is well known, and the feeble echo of it which is all that even a technically good photograph very often can be, will be compared to its disadvantage, with the personal recollection of the scene by many to whom it is shown. If this is not the case, at least it challenges comparison with the product of the professional picture postcard maker.

How different it is when we set forth with camera case slung over our shoulder for a tramp into just the

plain, ordinary agricultural country that forms four-fifths of England and a great part of Scotland and Ireland. Here there are no stock sights which we feel we must visit, or break down in cross-examination on our return. There is just mile after mile of undulating corn and grass land, with here a little farmhouse nestling amongst stacks and trees, there a barn or mill.

Water we may or may not find. Some photographers seem to look upon a place where there is no lake or river as utterly barren from the photographic point of view. I am far from denying the very important part which water plays in many pictures, but I never could

quite understand the unanimity with which an entire camera club, after tramping miles between delightful hedgerows, will unlimber and set up cameras as soon as a stream and bridge are reached. I knew a landscape photographer once who appeared to have but one idea, and that was that a picture meant a bridge. He went from bridge to bridge across a pictorial Sahara, and could hardly pass a culvert without exposing a plate. The lines of a bridge are often very delightful, and the reflections of it in the water may make exactly what we want as a foreground; but is there no other subject worthy of our attention?

I should like to put in a plea for the photography of the unimpressive—the recognition of the possibilities of picture-making which lie in

the common objects of the countryside. Not of waterfalls, Norman castles, and ruined abbeys, but of the play of light and shade upon a tree trunk; the luxuriant undergrowth along a ditch side; the flickering shadows across a dusty road; the upturned carts under the old tiled shed. These and hundreds of such subjects lie all around. All that is wanted is the eye to perceive



SUNLIGHT AND SHADE.

By J. ALDRIDGE.
Awarded Second Prize in the Beginners' Competition, June, 1908.

what may be done with them, and a little knowledge—a very little is really necessary—of photographic technique to do it.

Let me make a suggestion to the reader who has followed me thus far. The first opportunity that arises, if he lives in a town, let him take the train a few miles out, or, if he is already in the country, let him turn into some quiet lane or footpath where he has never yet thought of photographing. Let him endeavour to find a subject which he may take for his picture—a subject which will give him a chance of putting something of himself into his work. Something which is what it is because the photograph was taken by him; and not because it has been admired by hundreds of others before him. Let him seek for beauties of expression in a landscape rather than for the everyday picturesque. And having found it—for he may be sure it is there to be found—let him try to translate it faithfully and to the very best of his ability with the camera. If he does not see anything to photograph immediately, let him try it under other lighting conditions, when the sun is shining, or when the rain softens and subdues the distance that at other times is too pronounced. The time will not be thrown away, even if he does not expose a plate the first time or the second.

The work which he may do in this way, he will find, will appeal to his fellow workers quite differently from his photographs of picturesque waterfalls and rustic bridges. Some of them, perhaps,



THE TROUT STREAM.

By H. ESSENHIGH CORKE.

Awarded the Bronze Medal in the Special Subject Competition, June, 1908.



ON THE CANAL.

By JOHN C. MILLER.

will wonder what he could see in that old tree or in that ugly hedge to waste a plate on it; but others, who would pass by the waterfalls with the most supreme indifference, will pause awhile over his later work, and will give it an attention which is itself an encouragement. And he will be compelled to admit, moreover, that the latter class of workers includes just those whose opinion he feels is the most valuable, and whose own work stands highest. It is only necessary to look round our exhibitions to see how largely the ordinary countryside is relied upon to furnish themes for the camera, and how seldom it is, comparatively speaking, that the stock view or the conventional picturesque finds admittance.

The reason for this preference was well pointed out by "The Bandit" in one of those causeries which took the first place in the recent contents competition of *Photography and Focus*, a well deserved tribute to their point and pith. The beauty of the stock view is the beauty for which the photographer can take no credit

at all. It is a ready-made view, and affords little or no opportunity for the worker to introduce any of his own personality into his work. All he can do is to set up his camera before it and take it, much as hundreds of other photographers have taken it, a little better or worse perhaps, but not with any intrinsic difference. But in the ordinary open country, while there is landscape material all around which he can utilise if he will, it is material, and has not already been worked up by the hand of nature or the hand of man into ready-made effects.

Not only does it give him far greater opportunities to introduce his own feeling and spirit into his work, but it affords much more scope for originality in theme and treatment. On all grounds, therefore, let me urge those who are anxious to succeed in landscape photography to break away if they can from stock scenes and from conventional beauty spots, and to portray the subtler but no less fascinating charms of the open country.

The Aurora Photographed.

A remarkable photograph taken at West Hartlepool at midnight.



THE remarkable picture which we reproduce above was taken by one of our readers, Mr. F. Yeoman, from his house at Hartlepool at 11.30 p.m. on June 30th last. Everyone knows that on that night in particular, and to a less extent on the previous and the succeeding nights, there was a noteworthy display of the Aurora Borealis or northern lights. The magnificent glow in the heavens has been well rendered in Mr. Yeoman's photograph. In his covering letter he tells us that "the sea was beautifully lit up with a yellow light, such as is often seen when the sunlight is reflected from it in the daytime."

PRACTICAL PARAGRAPHS

RESTORING SPOILED PLATES.

It may happen occasionally that, owing to some accident or other, plates are light fogged, and so rendered useless. A box or slide may be opened under the impression that it is empty, and be found on doing so to contain plates; or even a series of exposures may be made and the first found to be so far in error that it is clearly a waste of time to develop the rest. If the size of the plates justifies the slight trouble, they may be restored and made fit to expose again, although they will be made much slower by the process. The plates should be immersed for three minutes in a bath made by dissolving one dram of potassium bromide and half a dram of chromic acid in half a pint of water. They are then well washed for at least a quarter of an hour in running water or in several changes, and are dried. All these operations must be carried out in the dark room, although there is no need for a very deep red light. The plates will serve very well for enlarged negatives or for work at home, where the plate can be developed immediately after exposure, so that any error in exposure may be remedied. The speed will generally be found to be between 10 and 40 Watkins, but this depends on the thoroughness of the washing.

* * *

SILVER black or STAINS ON brown NEGATIVES. stains

caused by damp when printing negatives on P.O.P. or other silver paper, it is said, can be removed by first soaking the negative for two or three minutes in five grains of potassium bichromate and twenty grains of common salt, dissolved in an ounce of water. It is then washed for five minutes, and placed for a minute or two in a solution of 20 grains of ammonium sulphocyanide in an ounce of water.

* * *

TO FIND THE FOCUS OF A LENS. There are many elaborate methods of doing this, but the following, which can be done at any time, gives a result which is quite accurate enough for any ordinary photographic purpose: Cover the focussing screen of the camera with an opaque card, in the middle of which make a hole the size of a pin's head. Put the camera on the table, and

set a lamp close to the focussing screen, so that its light shines through the pinhole into the camera. Then if we hold a card a few inches in front of the lens, we shall see on the card a circular patch of light. By racking the lens in or out we can soon find a position for it, which is such that the circular patch of light on the card no longer changes in size as we move the card nearer to or further from the lens. Whatever the position of the card, the spot of light on it remains, approximately, the same size as the stop in the lens. When this position is found all we have to do is to measure as accurately as we can the distance between the stop in the lens and the pinhole in the screen, and that distance will be the focus of the lens. The whole

A Clever Example of Dog Photography.



His First Subject.

By Arthur Wright.

THOSE who have tried to photograph one dog, posed in some particular attitude, know how difficult it is at times to get what is wanted. But in the very clever photograph which we are enabled to reproduce above, by the courtesy of one of our readers, who took it, we have two dogs, both apparently exactly as the photographer wished them to be—a feat that is certainly more than twice as difficult as dealing with one dog would be.

of the operations only take a few minutes to perform.

* * *

IT IS a great convenience to have two separate taps on the water pipe in the dark room. They should be a foot apart, and one should be provided with a rose, while the other has an ordinary nozzle. The nozzle should be at least sixteen inches above the bottom of the sink, as then a "Winchester" the biggest bottle likely to be used, can be filled under it; while the rose may be much lower, to prevent splashing when a negative is placed under it to be washed. With two taps, a negative may be put under one to be washed, leaving the other free for ordinary work.



Mr. Horace Mummery on the Artistic Impulse



From a paper read before the R.P.S. and printed in its journal.

IN a glass case at a certain museum between a lump of camphor and a blue label lies the first human work of art, a yellow bone on which is scratched the figure of a mammoth. A simple thing and a childish, but the man who made it in the dawn of the world was one of us; he hoped and feared, rejoiced and was disappointed just like Phidias and Michael Angelo, or you and me. On some remote day before remembrance and history was this thing wrought, in the joy of a man's heart was it conceived, and warmed in the making by an eager hand, though now so coldly laid and labelled.

Dreamily I once watched it till glass case and museum walls, and a most solid policeman faded quite away, and I saw the entrance of a cavern on a mountain side with a young man sitting before it with this very bone in his hand; his fellows were doubtless abroad at their labours or the chase, and he had stopped behind—we never did like hard work—to produce this. But is he quite alone? No, for from the cavern steals a maiden who stands awhile silently beside him, gazing through tangled hair and striving to make out what it is he holds so fondly, when quite hopelessly puzzled, she clasps her little hands together and cries, "How beautiful!" And he—for praise is strong wine to us—thrills at the words and yet would appear regardless of them, so answers carelessly, "Oh, it's only a little thing I'm knocking off, an impression of a mammoth that chased me yesterday; I hadn't time to make a study on the spot." She, still uncertain as to what it all means, finds safety in another "Beautiful!"—and he—he is happy. But on the morrow he looks again at his handiwork, and is sick at heart, and casts it from him into the river.

When in the course of ages the river becomes dry land, it is discovered, and is now No. 98, E Section, 4. The learned critic may say that this is not the first work of art but only the earliest that we have found; it may even be the sum of ages of experience, the climax perhaps of an early school. I myself would have expected carving or modelling to have preceded the flat; but it is no good guessing; of one thing only I am certain, the man who made this made more, for there is no leaving off in the business; it is like the drink craving, though I have known some men conquer that. At any rate, this yellow bone is a witness to the fact of how long ago the artistic impulse came into the world, that restless urge and desire which made man a rival of his gods, a would-be creator, that casts him, a dreamer, into a world for ever reeking with reality, a child to be dazzled with the tinselled wrappings whilst others get the sugar plums.

There are times in youth, fresh, early morning hours they seem to the memory, when the beauty of the world rushes in at every sense, when the feelings are overpowered. To one with a sensitive eye, the desire to reproduce comes as an idea not to be driven away; art, its labours and toils unseen, seems the most natural form of expression, wonder and love are ever its springs, and from them rises that artistic impulse which is behind every work of art. Far back it lies in the artist's mind, that which is not knowledge, nor experience, nor skill, but the something without which knowledge and skill are valueless. The quality of art declines when this impulse is diseased, the desire for production, unfortunately, does not. Often may the melancholy spectacle be seen of the artist as zealously producing the inartistic as ever in days of nobler inspiration he produced genuine art.

* * *

At different times of our lives we find ourselves contending against different errors, striving to overcome various mistakes, but before each one of us there is always a pitfall

into which we may easily tumble open-eyed. It is the mistaking of the means for the end. Technique makes such demands upon the attention (art being impossible without it) that the acquisition of technical skill, of execution, is an object never out of the artist's mind. How natural, therefore, is the error that so many fall into of accepting technical skill as art. Those who know the drudgery that must be given in exchange for the most moderate power over the brush will see how easily this mistake can be made by the painter. But to all, whatever their medium may be, the same temptation occurs. Remember also that to the bulk of the onlookers cleverness and dexterity will always appeal.

I do not for one moment deny that fine execution is one of the sources of the pleasure to be derived from pictures; it is the wonder at difficulties overcome, but it is different in degree only from the pleasure given by the juggler who balances a collection of miscellaneous articles on the end of his nose. The deepest pleasure that art can give is the revelation of beauty before unseen, the expression of the artist's thoughts concerning the things he loves. But though good technique is necessary for such expression, too often it is this, the means only, that attract the attention, and the end of art is obscured and lost in pride of technical skill.

* * *

In photography the controllable processes afford an opportunity for the introduction of what is too often merely technical display, to which the aim and feeling of the picture are sacrificed. One difference between brush and camera I would ask you to notice. Photography is now so universal that your critics and the crowds which throng your exhibitions are camera users. Now to some extent there is a healthy check on the extravagance of the painter, because his public are not all dabblers in paint. The untechnical lover of pictures makes a good critic, and even the Philistine has his uses. There are also many schools of painting which are all so infallible and immaculate that a healthy turmoil keeps art well stirred up and fresh.

* * *

Another cause of artistic failure is the misconception of what is really beautiful and suitable for pictorial purposes. There are two men in each one of us—the old primal savage that still hears the call of the wild, and the quiet citizen dominated by the smug rules of civilisation. Where one or the other predominates all is well; the pioneer and the district councillor have each in his own way settled the problem of living. But many of us beat about with two-fold purpose; wearying of town we cry for the wild, but a fortnight's holiday spent in camping out, with a rainy day or two thrown in, is about as much as we want. Out of these conflicting emotions rises Romance, the dream of the desired but unfound, that quality in literature and art which satisfies our wild self, whilst our citizen self sits comfortably in his easy chair. All art aims to be romantic; it must be. The poor man buying at the cheap framer's a real hand-painted picture for eighteenpence, satisfies the dim yearnings of his soul for romantic beauty—note the subjects of these paintings, water-mills, ruins by moonlight, lake sides, mountains, and the like.

Now most of the trouble in art, for which we are always slanging one another, proceeds from the different opinions entertained as to what is romantic. In this matter convention largely reigns. Certain things are thought to be romantic in themselves. There is a decrepit tumbledown cottage, calling to the sanitary authorities for rasure to the ground, which is considered pictorial in any aspect or lighting; there is a cavalier costume also, which, when donned, turns the meekest modern young man into a magnificent

swashbuckling hero, ready to hand for camera or brush. Tamed as we are by civilisation, with the majority of people sham romance is fully satisfying; the bentwood rustic bridge and the patch of trimmed and gardenised nature around it, the kind of thing that our show places are fast becoming, pass as the picturesque and charm the uncultured and inexperienced. We all go through this stage. Outgrow it? you say. Well, yes; we do more or less; but there's a dormant craving for the pretty left ready at any time to assert itself. It is very difficult at every hour to see bigly.

* * *

There are fashions also; we love to copy one another. A schoolmaster can be sure his boys have been copying when he sees the same figure wrong on every slate; of course they didn't know what they were copying or they would have trusted to themselves. Now in art it is the mistakes, or at any rate, the peculiarities that are chosen for copying. Certain things that are right perhaps with one person may be wrong when imitated. Style and method, for instance, are personal; they fit like a suit of clothes, in which the better the cut the less likely they are to fit anyone else but the owner. In ready-made clothes there is a sort of generalised cut by which they are ready to cover everyone in general without fitting anyone in particular. Without much difficulty such a style may be acquired in art. There is a certain gloomy fashion, a love of low tone, that has been prevalent for some good while past in photography, the reason for which I have never been quite able to fathom. In colour, the artist may lower the tone of his picture for the sake of

richness of tint, but what is the advantage in monochrome? Saving, of course, in such effects as it legitimately expresses.

Do some of our rising photographers work only at night or on the eve of thunderstorms, or when London's November specials are on tap? With regard to landscape, where this fault is most noticeable, I would point out that nature is really high in tone, much higher than is generally supposed; in fact, those intensely bright water colours of Turner's last period, shown in the basement of the National Gallery, are not a merely fanciful rendering of nature, but a wonderful attempt to translate the high pitch of the open air. It is true that they do not look realistic, for a certain lowering of tone of all the solid objects is the only way we have of making the earth appear substantial, and the sky aerial and bright. Now just how far this darkening is to go is a very important matter. One passes from a Turner to a De Wint, and though the change is so tremendous, yet both seem beautiful and both are true. But when a picture is made very dark, and even the sky is kept low in tone, an unreal and oppressive effect is given. If into such a work one or two hard-edged high lights are introduced, such as a gleam on water or light on a white house, etc., there results a very vulgar, though rather fashionable, rendering of nature.

Fashion in art is fatal for any charm that a picture may be capable of yielding—in fact, the only excuse for spending time and labour on its production is the personal element that the artist introduces. How often in galleries, both of photographs and paintings, some small and modest works are found with genuine feeling and power to charm that are lacking in the bolder and more ambitious attempts.

The Advertisement Competition. Awards.

THE competition for the list of the six best advertisements in the Special Summer Number of *Photography and Focus* brought a very large number of entries, and the counting of the votes and examination of the entries was only just finished in time for the result to be announced in this issue. The following is the list of six best advertisements as shown by the votes of all those who sent in:

- | | |
|---|--------------|
| (1.) Wellington and Ward ... | 4,141 votes. |
| (2.) The Rotary Photographic Co. ... | 3,981 " |
| (3.) W. Butcher and Sons ... | 3,574 " |
| (4.) Aldis Bros. ... | 3,538 " |
| (5.) C. P. Goerz ... | 2,653 " |
| (6.) The Sports and Games Association ... | 2,138 " |

The next two places in order were taken by—

- | | |
|--|---------|
| (7.) The Thornton-Pickard Mfg. Co. ... | 2,020 " |
| (8.) J. J. Griffin and Sons ... | 1,815 " |

AN ENGLISHMAN has been arrested in the neighbourhood of Belluno, states the *Evening News*, charged with photographing near the important fort of Montericco, close to Pieve del Cadore. His plates were developed by the military authorities, but were not found to contain any pictures in which the fortifications were shown, or which were of military importance.

* * *

"HOW TO MAKE OIL PRINTS" is the title of a little booklet by M. Robert Demachy, which has just been published, price 6d. post free, by Messrs. J. A. Sinclair and Co., Ltd., of 54, the Haymarket, London, S.W. In addition to M. Demachy's own very practical and useful advice, there are some supplementary notes by Mr. Sinclair himself, who has been working the process recently with much success.

FOR DEALERS ONLY. A fully illustrated and most complete price list of photographic goods of all kinds, covering no fewer than 674 closely printed pages, has just been issued "for the use of dealers in the British Isles" by Messrs. Kodak, Ltd.

* * *

WORKERS FOR THE TRADE. Messrs. C. Haseler and Son, 94, Bridge Street West, Birmingham, send us the price list they have just issued of all classes of metal work and appliances connected with photography and lanterns.

* * *

A RUSSIAN EXHIBITION. The Kiev branch of the Imperial Russian Technical Society will hold an international photographic exhibition at Kiev in December, 1908. The prospectus is ready, and can be obtained on application to the Technical Society, Kiev, Kreshtchatik 10.

THE LODGE HIDING TENT has been designed by Mr. R. B. Lodge, the well-known bird photographer, for the purpose of concealing a camera and its user for doing natural history photography without disturbing or frightening the subjects. It is made of stout canvas, and is very portable, rolling up into a bundle, which weighs about three pounds. It is of obelisk shape, so as to fit over a camera of the "Bird-land" type, while this is on a tripod, and will allow the operator to sit beneath it, and watch his subject through a small spy-hole. The tent is made either in brown or green, and is provided externally with a number of tapes by means of which branches or grasses can be tied all round it to conceal it. The makers are Messrs. Sanders and Crowhurst, of 71, Shaftesbury Avenue, London, W., and the price 18s. 6d., or free by post 19s.



REGULATIONS.—(1) Envelopes must be marked "Query," and the "Enquiry Coupon" found elsewhere must be enclosed. (2) The full name and address in addition to a *nom-de-plume* must be given. (3) Only one question on one subject is allowed in each letter. (4) Prints may be sent for criticism, but a separate coupon must be sent with each print, and a stamped addressed envelope (not loose stamps) for their return. Queries are dealt with in strict rotation in the order received. Only "Urgent Apparatus" queries will be dealt with by post, for which purpose a stamped envelope must be enclosed.

THE WEEK'S QUERY.

Duplicating Negatives.—I have a good negative from which I wish to make a large number of P.O.P. prints, and it would therefore be a great convenience if I could duplicate it. Will you please tell me the best way of doing so?—J. CHARLES STREET.

The best way is to get some transparency carbon tissue, to sensitise it and to squeegee it to ferrotype to dry, and then to print it by contact from the original negative. It is collodionised and transferred to glass for development. When as good a transparency as can be made has been got in this way, a negative is made from it, also on transparency tissue, in exactly the same way. It is well to make several while one is about it, as the trouble is very little greater than for one. If the duplicate negatives are not quite as vigorous as the original, they can be made so by immersing them in a solution of potassium permanganate, strong enough to stain them sufficiently. This method is the best, as it results in less loss of "quality" than any other; but for those who do not wish to use the carbon process for the purpose, the positive transparency and the negative from it may be made on lantern plates in the usual way.

REPLIES IN BRIEF.

G. J. SMITH (Hornsey).—The factor without bromide is 11.

E. HEAD (St. Leonards).—Yes, on application at the turnstiles and paying the fee of one shilling.

F.T.B. (Wrexham).—We believe it to be one-two-hundredth, but cannot say more definitely. It would be best to write to the maker.

ENQUIRER (Corfe Castle).—We are afraid we cannot help you; the only plan would be to advertise in *Photography and Focus* what you are prepared to supply.

FILMS (Sheffield).—Probably about one part to thirty of water; but you must find out by trial if this takes the exact ten minutes or not, it will depend on the temperature and on the make of the film.

ROB ROY (Wolverhampton).—Develop each one separately, like a plate, rinse it and fix it straight away. The developer can be used for several cards, but must be replaced by fresh as soon as their tone becomes rusty or greenish instead of black.

H. T. KNOX (Bristol).—No, not at all usual; you are not using the Wynne properly. If two photographers, one accustomed to one make of meter and one accustomed to the other, compare notes, it will be found that they both make the exposures practically the same.

CABIN BOY.—Thanks for your suggestion; but if you read the queries carefully you will see we act on it. Don't you find the advertisements interesting? We cannot explain our contributor's explanation. These things will happen; and all we can do is to let bygones be bygones.

ECCO (Devizes).—We think that the hydrochloric acid must have been much stronger than you were aware. It has attacked the gelatine, giving rise to a defect known as reticulation. There is no remedy; but it can be prevented by using the mercurial solution much more dilute.

P. S. MARSHALL (Walthamstow).—We are pleased to see your interest in the paper; but you are a little weak in your facts. It would repay you to go through it again we think, distinguishing between reading matter and such things as advertisements, announcements of competitions, etc. The statement about the cover is incorrect.

E. F. WHITWORTH (Louth).—Amongst postal societies are Camera and Co., secretary Mr. H. Wild, Berrycroft, Blatchington Road, Warwick Park, Tunbridge Wells; and Sun and Co., Mr. Martin J. Harding, The Sycamores, Neole Brace, Shrewsbury. You had better watch our columns for announcements of vacancies from time to time in the many others.

CLUBMATE (Nelson) has an enlarger in which the ribs of the incandescent gas mantle show on the easel. He asks why it happens, and if we can suggest a remedy. A.—It happens because the condenser and lens together form an optical system which, approximately, focusses the light on the easel. The only remedy, if the marks show in the enlargement, is to introduce some form of diffuser, such as ground glass between the light and the condenser. But although it often happens that they are visible when focussing up, there is not usually much trouble with the actual enlargement on this ground, especially if the lens is not stopped down unnecessarily. The slight movement of the mantle during exposure usually cures it.

W. EBLEY (Woking).—There is nothing better than formalin half an ounce, water ten ounces.

B. WALLACE (Upper Tooting).—It is flare spot due to a bad lens, and is a matter for the maker.

F. A. HAIGH (Rugby).—Many thanks for your suggestions, which are having our serious consideration.

J. S. DICKINSON (Newcastle-on-Tyne).—Many thanks for your suggestion, which had also occurred to us at the time the paragraph was written.

MITZ (Bury Street).—One of the flatted oil backgrounds which are supplied by any of the big dealers is as suitable as any. You can get them of two different shades on the two sides.

H. THOMAS (Coventry).—Many thanks for the tip, which we are glad to use. Thanks also for the suggestion, which, unfortunately, we cannot adopt at present, much as we should like to do so.

MERO (Dorking).—Stopping down will help it a little but not much. It shows that the lens has not a large enough field to allow of the front being raised so much, and the only real remedy is to get another lens.

W. J. WOOD (Bolton).—"Bulletin de la Société Française de Photographie." The chief French photographic publishers are Gauthier Villars, Quai des Grands Augustins, Paris, and C. Mendel, 18, Rue d'Assas, Paris.

CHRONOS (Devizes).—A strong combined toning and fixing bath will remove them when they are not very bad. But being of the same composition as the picture itself, anything that attacks the one attacks the other.

ORTHO (Enfield).—If you specifically charged him for the negatives they are his; if you merely sold him the prints without any stipulation they are your property, although the copyright in them belongs to your customer.

AN AMATEUR (Bournemouth).—You are quite correct. Owing to differences in the methods of measurement and in the systems generally, it is impossible to get conformity. Did you read the article on the subject we printed a month ago? We think you must have missed it, as it answers your letter completely.

LUX (Macclesfield).—Judging from your letter, the fault would seem to lie in the stop bath, and we should advise you to omit it, or else find out where it is wrong. We cannot speak more definitely, as we should want to know much more about your method of work. It would be well to send the print to the makers of the paper, and ask them if they could give you any help.

SUNSET (Wimbledon).—We are afraid we cannot give general information in this column, which is only for replies to specific enquiries. The best advice we can give you is to practise on the common, using an exposure meter, and you will then be able to work in confidence when you get to Aberystwyth. But you must entirely banish the idea that it is merely a case of using a predetermined "exposure, stop, development, etc." There is no such royal road.

HYKO (Homerton).—"Practical Enlarging," by John A. Hodges, price 1s. nett, or post free 1s. 2d. from our publishers, is the best; but it deals with the whole subject and not specially with daylight work. The distances would be approximately $8\frac{1}{2}$ and $16\frac{1}{2}$ inches, the latter from the lens to the bromide paper; but the actual final adjustment would have to be made by trial.

G. R. GIBBS (Southall).—Our contributor states that if you have never been before he would strongly advise you to go to T. Cook and Sons, Ludgate Circus, E.C., and get a list of the hotels they recommend and their coupons. You cannot then go far wrong. Sufficient plates for the trip should be taken; it is very bad policy to rely on British plates bought abroad.

W. J. (Blackburn).—The following is practically the same thing: The vanadium salt must be dissolved in hot hydrochloric acid and a little water. The ferric chloride and oxalate are added to the oxalic acid solution diluted with half the water, then the ferrieyanide dissolved in a little water is added and finally the vanadium solution. The prints are toned till they are blue, then washed until they are green, any yellowing of the whites being removed with a half per cent. solution of ammonium sulphocyanide.

Vanadium chloride	...	...	...	...	20	grains
Ferric chloride	...	...	...	...	10	grains
Ferric oxalate	...	...	...	...	10	grains
Potassium ferrieyanide	...	...	...	...	20	grains
Oxalic acid (saturated solution)	...	...	...	...	2½	ounces
Water	...	...	...	...	20	ounces

W. DYKE (London, E.C.).—We are much obliged for the information.

B.W.E.L. (Mayfair).—We have three communications we shall be pleased to send on if you will let us have your address.

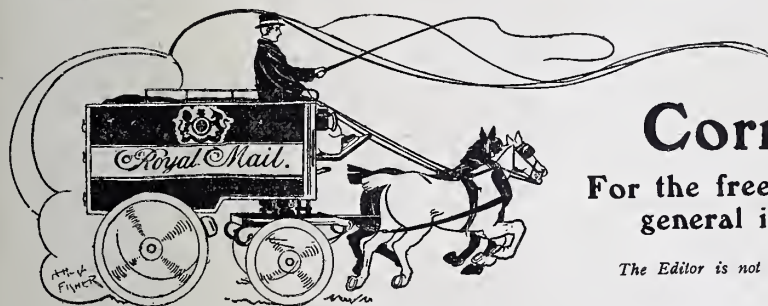
H. F. OGDEN (Bradford).—We would suggest gentle rubbing, first with bread-crumbs, and then with cotton wool slightly moistened with benzoic.

W. HALL (Altrincham).—We have an article in type, for beginners, on the very subject, and hope to use it shortly. We do not know where you went wrong, the negative was smashed to atoms when it reached us.

AMATEUR (Lewes).—You will get the F number in each case, if you divide the distance between the stop and the ground glass, when something a hundred yards away or more is focussed, by the diameter of the opening of the stop.

NOVICE (Llanely).—You would do well to read "The Hand Camera," by Wastell and Bayley, price 1s. nett, or post free from our publishers 1s. 2d. You would then be in a better position to select a camera. At present your request is too vague to enable us to give you advice that would be of any real service. Read it and write us again.

J. BAVERSTOCK (Cardiff).—There is no reason why you should not keep the chrome alum and metabisulphite in a separate solution, in part of the water, adding it as required. You could then use the formula you have been using. The deposit is not injurious, but it indicates that the solution is injurious. No bath that we know of will keep indefinitely, except in the form of two separate solutions, and even then the metabisulphite will deteriorate.



THE ALUM BATH FOR P.O.P.

Sir,—With reference to Mr. Burt's letter on the subject of glazing we should be glad if you would allow us to give him the benefit of our experience.

In a few words it is that alum is a nuisance, and its disadvantages are many. The remedy is to use formalin (formaldehyde gas in forty per cent. solution). It is invaluable; and since using it we have never had a print or card stick, although we sometimes glaze over a hundred per day.

The directions for its use are to take one ounce of formalin to ten ounces of water, to immerse the prints in this for five minutes, and then to place them direct on the glazing surface. The result will be that the cards will come off quicker, stiffer, and with a gloss equalled only by glass itself.

Yours, etc., SUTTON AND GROOM.

DRYING A NEGATIVE QUICKLY.

Sir,—I can vouch for the efficiency of the method described on page 216 of *Photography and Focus*. I have used this plan now for some time, and have much better results than before.

There is one precaution to take, and that is to use a linen cambric handkerchief. Cotton is too fluffy, and will transfer the fluff to the plate.

My routine is as follows: After washing I take a lump of cotton wool and well swab the film and wash off the back of the plate. Anyone doing this for the first time will be surprised to see the amount of dirt it will get off. As the plates are swabbed they are placed in a rack to drip, and when the batch is finished I take a handkerchief as it comes from the laundry and open it out so that it is a strip the length of the handkerchief, but folded into four. I place the plate film down to one side of the middle crease, and polish off the back of the plate with another handkerchief. Then I fold the spare half of the first handkerchief over the plate, turn the whole over, and rub it with the hand in the same manner as when blotting writing, but rubbing only in one direction. So long as the handkerchief does not slip on the film there is no fear of injury. When the handkerchief is peeled off the plate the pattern of the cloth will appear impressed on the film, but in two minutes it is perfectly smooth. After the treatment the plate will dry uniformly and rapidly.

TOPHO (Northfield).—The makers are the Bausch and Lomb Optical Co., Rochester, N.Y., U.S.A.

R. H. MATCHLESS (Walmer).—Houghtons, Ltd., 88 and 89, High Holborn, London, W.C., are the makers of the Ticka.

BIZ (Stepney).—We should be very glad to tell you, but it is quite impossible. You must find out by trial at the time. Use the plates and the developer you are accustomed to use.

A. STARGER (Luton).—We do not quite understand your postcard. Photographs are only criticised by post, unless they happen to be selected by "The Bandit" for the "Critical Cause."

A. NORMAN (Bloemfontein).—All the more important competitions are announced two or three months before the closing date; but there must always be a number of readers who are too distant to take part in them.

W. E. HUGHES (Wood Green).—Kachin ought to suit you, but we cannot say whether you will be able to use it, as you certainly seem most extraordinarily sensitive. We have never heard of the trouble with amidol or with rodinal. The developers named in your letter are certainly not "more or less the same constituents under different names," but are most dissimilar in chemical composition.

MERRIE CITIE (Carlisle).—The discolouration is because the paper is stale. If it is only slight it disappears in the hypo, but if it does not there is no very satisfactory cure. You might try dissolving ten grains of potassium ferricyanide in three ounces of water, adding three ounces of your ordinary hypo solution and immersing the print for a moment. This may brighten it, but will soon reduce the picture also. Prints so treated must be well washed.

Correspondence.

For the free discussion of all matters of general interest to photographers.

The Editor is not responsible for the opinion of his correspondents.

Before setting it up to dry the surface is examined to see that no small pieces of film off the edge have become attached to it. If they have the tip of the finger is moistened with the tongue, and any piece of film is gently rubbed off.

One more caution. Beware of nails when swabbing, or a scratched film will be the result.

Yours, etc.,
D. G. TAYLOR.

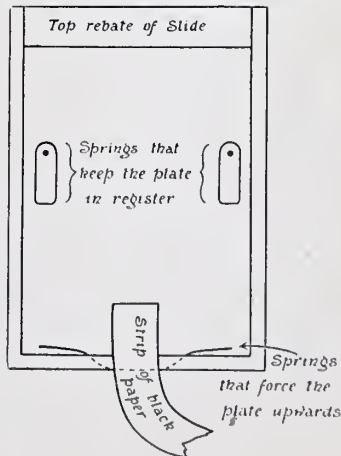
THIN SLIDES AND THICK PLATES.

Sir,—Some other readers may have had the same difficulty when using thin metal dark slides that I have met with, and have had the ill-luck to buy a box of plates a shade too thick.

Although the makers of the dark slides appear to allow for thick plates, these do not go into the rebate at the top of the slides as easily as thin plates do. This is the case because the spring in the bottom rebate that pushes the plate up into the top, is hardly strong enough when the plate itself is a tight fit, and is pushed by the spring behind.

I have overcome this little trouble thus: Part of a strip of black paper, such as that used with roll films, from half to three-quarters of an inch wide, and about four inches long, is placed under the plate at the bottom end before pressing the plate on to the spring, a piece of the black paper, about two inches long, being left out. This may be used as a handle to assist the bottom spring to lift the edge of the plate into the top rebate, as shown in the sketch. The paper strip can be drawn out quite easily when the plate is in position.

Yours, etc., H. T.





THE LATEST IN APPARATUS & MATERIAL.

Azol : A New One-solution Universal Developer.

DEVELOPERS differ, it has long been recognised by all these whose opinion carries weight, not so much in the way in which they perform the great function of their existence—the development of the plate or paper—but in their minor and subservient characteristics. Any developing agent on the market, properly made up, will develop a plate and will give as good a printing negative as any other. Of that there can be no reasonable doubt. When we come to weigh up the merits or demerits of a new developer, therefore, we realise that if it is to achieve popularity it must be possible to say a good deal more for it than this.

The qualities it must possess, besides that of developing a good negative or print, are summed up in the one word “convenience.” We do not want to have to do a lot of weighing and measuring every time we develop a plate. Therefore it should be a solution, and preferably a single solution. It should keep well, to avoid waste. It should not stain either the photographs that are developed in it, or the photographer's fingers. If it is to be used for developing prints as well as negatives, it becomes important that it should give pictures of an agreeable colour, with perfectly clean whites. One would also like it to be economical in use, and highly concentrated, so as to be conveniently portable. One more important factor in its popularity will be its freedom from any injurious action on or irritation of the skin.

This is a formidable list of requirements, but it has got to be met by a new developer if it is to hold its own; and it was on all these points that we examined “Azol,” the new one-solution developer which Messrs. Johnson and Sons, of 23, Cross Street, Finsbury, London, E.C., are now manufac-

turing. At starting, we may say that we tried the new developer on plates, films, bromide, and gaslight papers, and for lantern slides. For plates and films it is merely diluted, for the others a very little of a ten per cent. solution of potassium bromide may be added. In every case the developer yielded results which left nothing whatever to be desired: the negatives were technically perfect, the prints clean and of a good colour.

Azol is a colourless liquid of a highly concentrated character, since in the strongest working solution—that for gaslight papers—it is diluted with twelve times its bulk of water, while for plates the dilution may be anything almost from twenty-four times upwards. We have not had it long enough to be able to write of its keeping qualities, but it has shown no signs of alteration up to the present. It does not stain in the slightest, and does not irritate the skin.

The Watkins development factor of Azol is given by the makers as 30, and this our own trials bore out, using a plain solution of a quarter of an ounce of the concentrated developer diluted to make six ounces. For tank development the dilution recommended is threequarters of an ounce to forty ounces, with which the development of films is complete in something under half an hour.

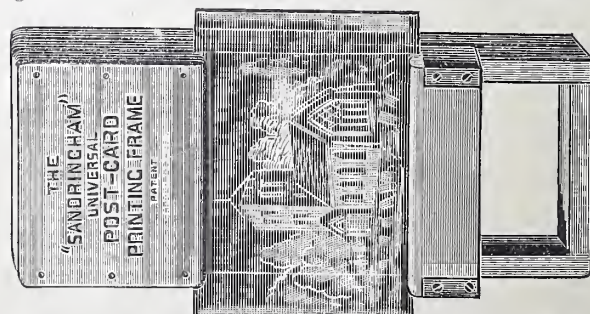
It will be seen from what we have written, therefore, that Azol bids fair to achieve popularity amongst all those who require a single solution developer, since it has all the good qualities which such an agent ought to possess; while coming from a house of the standing of Messrs. Johnson and Sons, the most complete reliance may be placed in its purity and uniformity. A three-ounce bottle sells at 1s. 3d., an eight-ounce at 2s. 6d.

The Sandringham Universal Postcard Printing Frame.

POSTCARDS are to-day the most popular photographic size, but it is not every amateur by any means who makes all his negatives for postcards on postcard size plates. Many there are who work 5 x 4, half, or even whole-plate, who wish at times to print some part of these negatives in whole-plate size. It is for this large class that the “Sandringham” Universal Postcard Printing Frame, of Messrs. May, Roberts, and Co., is intended to cater.

The illustration shows the design of the frame so clearly that a very brief description will be sufficient. The frame is represented as it would appear from the front when a half-plate negative was in position to have a postcard printed from the centre of it, across its width. That part of the frame which can be seen holding the lower edge of the negative is adjustable, so that negatives of any size up to whole-plate inclusive can be inserted. The negative is thus put into position so that the part which is to be printed comes against the opening at the back which is to receive the sensi-

tive postcard. This opening is provided with the usual hinged back and springs by which the progress of the printing can be watched.



The “Sandringham” frame is made in one size, which

will take any negative up to half-plate, either way about, and whole-plate negatives can also be accommodated one way in it. If necessary the postcard can be put in sideways so as to correct any lines that should be vertical, but are not so in the negative. The price of this very handy and efficient piece of apparatus is 1s. 3d. It is neatly finished in white wood.

The Sandringham Draining Rack.

IN these days when, to meet the demand for cheapness, there is such a tendency to make apparatus of a more or less flimsy character, the very substantial nature of the "Sandringham" Draining Rack is a welcome feature.

The rack, which is of square pattern, open at the top and bottom and at the ends, is strongly made of stout zinc with folding handles and metal grooves. The result is a firm, rigid piece of apparatus, that runs no risk of losing its rigidity even with its full load of a dozen plates. The rack, which is one of Messrs. May, Roberts, and Co.'s specialties, is British-made, and is supplied, each in a neat cardboard box, in three sizes—quarter, half, and whole-plate respectively—at 10d., 1s. 3d., and 1s. 6d.

Three German Text Books.

LANDSCAPE photography is catered for in Germany, in the way of literature, better than it is in this country, where there is nothing to correspond with "Leitfaden der Landschafts-Photographie," by Fritz Loescher, which we note has just reached a third edition. The book is a mass of sound information, but we could wish its illustrations were more representative of the best German, or, better still, of the best international landscape work. It sells at 3 marks 60 in paper covers, 4.50 in cloth.

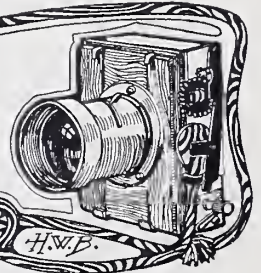
Another work of a very special character is "Künstlerische Gebirgs-Photographie," by Mazel, of which the second edition has been issued. The illustrations in this case are very fine, and the letterpress fairly exhausts the subject of mountain photography in a couple of hundred closely printed pages. Its price is 4 marks in paper, 5 marks in linen.

"Die Projektion," by Hans Schmidt, has also reached its second edition. This book deals with the lantern in a very thorough manner, the chapters on illuminants in particular being fully illustrated and right up to date. It sells at 4 marks in paper, or 4m. 80 bound. All three are published by Gustav Schmidt, of Berlin.

The Start of a Hundred Yards Race.

BY ADOLPHE ABRAHAM, B.A.

The fifth of a series of short articles on focal plane photography. Preceding articles appeared in "Photography & Focus" June 9 & July 14.



AS the athletic season is now in full swing, I feel that a few words upon a topical subject may be acceptable. The hundred yards race is a very familiar subject, and ninety-nine per cent. of photographers select the finish for their pictures; the neglected start, however, is much more interesting.

The start for the hundred yards bases its photographic interest on the crouching position which the runners adopt. A scratch race should, of course, be selected—handicaps are nearly always useless—and the photographer may stand to the right or left according to the considerations of light, etc., except he be restricted to the spectators' enclosure, when he will have no option.

A perfectly straight view is obviously impracticable, but a position which, as nearly as possible, faces the runners should be taken up, and one should be far enough back to allow a substantial margin on both sides of the plate. Realism is, of course, added by the smoke of the starter's pistol. I have often asked the starter to stand behind the runners—and, in fact, all the best starters prefer this position.

Difficulty in snapping is great only if the starter is inexperienced. In most sprints one at least of the runners breaks away, trying to "beat the pistol." A bad starter loses his head, the men all start at different times, and the photograph is spoiled. A good starter has the erring ones

back time after time, so that all get away simultaneously. One must hold on tight, therefore, and determine not to snap until the pistol flash is seen. Exposure has to be extraordinarily brief, as the initial movements are remarkably fast. At close quarters about one-six-hundredth of a second is necessary.

It is interesting to note that in the photograph reproduced



The Start of a Hundred Yards Race.

one man only (the runner on the extreme left of the picture) has started fairly at the report; all the other three "beat the pistol." This was due to two of the competitors, who were foreigners and exceedingly excitable, breaking away repeatedly, so that a fair start was out of the question.



Impure Sodium Sulphite: A Warning.



SULPHITE is one of those chemicals which ought never to be purchased for photographic purposes except from a perfectly reliable source. An example of trouble which may arise by neglect of this was recently given in the "Bulletin of Photography." The writer therein pointed out that while using amidol for the development of bromide paper he met with fog repeatedly. For some time he assumed that it was the paper that was light fogged, but every attempt to prevent the fog on this assumption failed. Then the sample of amidol was suspected, but finally, on trying a new sample of sodium sulphite, the trouble disappeared, and showed that it was the sulphite all along that was to blame.

On examining the sulphite, it was found to be contaminated with sodium carbonate; and it is well known that the presence of only a very slight trace of carbonate in an amidol developer is enough to make it fog.

The commonest impurities found in sulphite are carbonate and sulphate. Of these the carbonate is only likely to give trouble when amidol is used, as with almost all other developers sodium carbonate is added to the sulphite in making up the solution. Still, if it were present, although it might not be actively injurious, it would at least prevent

the user from knowing what the strength in alkali of his solution was, and would mislead him as to the time taken for development. The presence of sulphate would be similarly misleading, but its influence would be in the opposite direction, sodium sulphate being a retarder of development. Of course,



By John T. Roberts.

Awarded a prize in the "Focus" Landscape Competition.

in either case, beside the positively injurious effect of the impurity, whatever it might be, there would also be the negatively injurious effect, due to the fact that owing to its presence there was less sulphite in the developer than there should be.

The moral of the whole thing is to buy chemicals for photography only from dealers of repute.

Photography in Uganda.

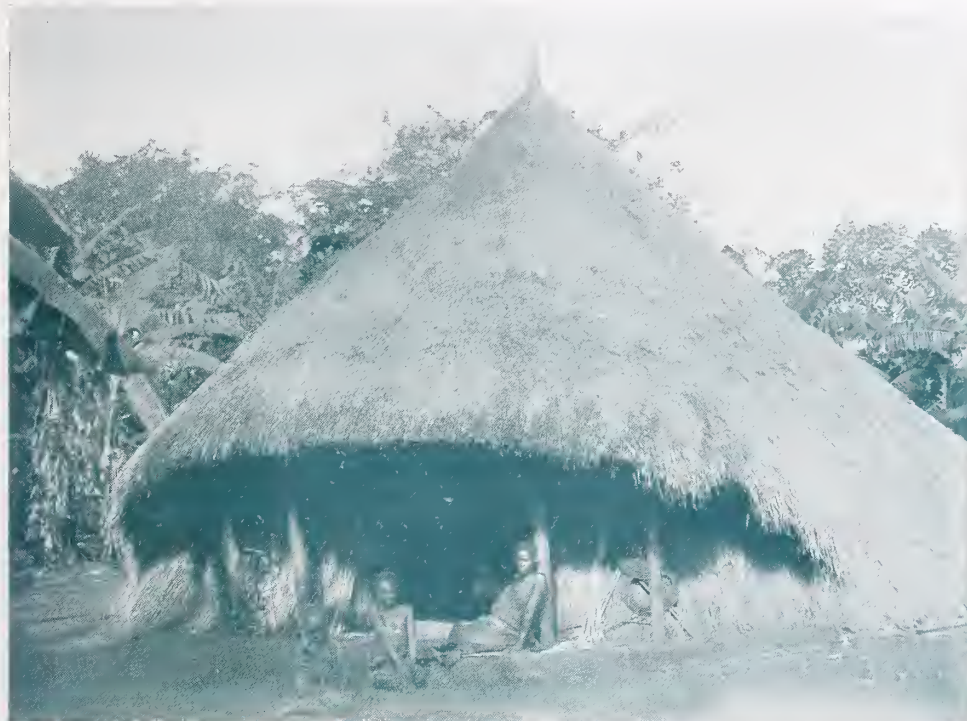
By E. Brown.

Special to "Photography and Focus."

GEOGRAPHICAL Africa, with its delightful scenery, its strange people, glorious vegetation, and wonderful fauna, offers to the photographer a most fascinating field for work. For some years I have taken up photography as a pastime in this country, and perhaps a few remarks on my experiences may be of interest.

The photographer at home, with a nicely arranged dark room and every convenience for his work, will not readily

appreciate the many photographic difficulties met with out here. Uganda may be called a country of makeshifts, and with regard to photography this is particularly true. As a general rule, the traveller out here spends his whole time under canvas, and the conversion of a 9ft. by 7ft. tent into a dark room, when it is also one's dining room and sleeping compartment, is no easy matter. Furthermore, everything must be packed up and the tent taken down before sunrise next morning, when the march is resumed.



The hut that was used as a dark room.

I have on many occasions used a native hut as a dark room at night, but as one generally has the company of sheep, goats, and fowls, and half a dozen natives with long pipes, and the only ventilator, the door, must be closed, it is far from being a satisfactory place. Unfortunately, the lack of light in these buildings prevents me giving an interior view, but I give an exterior view of one (reproduced above) which I used quite recently for this purpose.

These huts, however, are excellent places in which to change plates in the daytime. One can get inside and get the natives to cover over the doorway with grass, and the result is a perfectly lightproof, though evil-smelling, and usually smoky, dark room.

To the native an air of mystery surrounds the art of photography, and consequently he is ever on the look out for an open box affording him an opportunity for discovery. The (to them) secretive manner of covering the camera with a focussing cloth and afterwards using a dark room for developing suggests to their superstitious minds the employment of unnatural powers. I have often found that raw natives who have never before seen a camera have stood perfectly still whilst I have gone through the performance of fixing up my camera, only to bolt

the instant I placed the focussing cloth over my head. Unfortunately, too, at the time, one cannot show the picture one takes, and thus secure their confidence. I have been frequently told by natives that many white men have photographed them, but, say they, none of them could show us the pictures. Sometimes a native will stipulate that he be shown or given a picture on the spot. Of course, one's own boys become accustomed to the practice, and they can often persuade the frightened native that no harm will be done him. My own boy I have taught to fix up my camera and give exposures after I have focussed it, but even to him the focussing cloth has no use but to hide my actions. This youth I once found immersing my developed plates in a solution which he had made up with some quinine tabloids, in imitation of my method of developing with pyro-soda tabloids.

Yet, in spite of the many inconveniences and annoyances, photography is as popular here as in other and more civilised countries, and happy is the traveller who has sufficient knowledge of the art to enable him to obtain decent pictures of the many interesting scenes he sees every day. To the naturalist no country in the world offers such a great and varied array of interesting subjects for the camera.



A good cloud effect on the shore of the Victoria Nyanza.



THE BRIDGE.

BY EASTEN LEE.

Awarded the Silver Plaque in the Advanced Workers' Competition for June.

Reliable



IMPERIAL PLATES have proved time after time their absolute reliability, and have gained a hold on the confidence of the public which becomes stronger every year.

In working with plates having such a reputation, one has that delightful "sense of safety" which is inseparably associated with the Imperial name.

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OFFICES.—20, Tudor Street, London, E.C.
Telegrams: "Cyclist, London." Telephone: 5670
and 5611, Holborn.

PUBLISHING DATE.—PHOTOGRAPHY AND
Focus is on sale throughout the United Kingdom
every Tuesday morning.

SUBSCRIPTION.—PHOTOGRAPHY AND Focus
will be forwarded regularly at the following rates:
GREAT BRITAIN. ABROAD.

	s. d.		s. d.
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Six Months	3 3	Six Months	5 5
Three Months ...	1 8	Three Months ...	2 9
Single Copy	1½	Single Copy	2½

REMITTANCES.—Postal Orders, Cheques, etc.,
should be crossed and made payable to Iliffe
and Sons Limited.

ADVERTISEMENTS.—All communications on
advertisement matters should be addressed—
The Advertisement Manager, PHOTOGRAPHY AND
Focus, 20, Tudor Street, London, E.C. All copy
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particular week must reach Tudor Street by the
first post on Monday morning in the week previous.

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SALE AND EXCHANGE (for Amateurs only).
—1d. per word, minimum 6d.

PROFESSIONAL AND TRADE.—Three words
2d., minimum 1/-

All advertisements to be inserted on these
terms must be accompanied with remittance.
To ensure insertion, letters should be posted in
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not later than first post on Wednesday.

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addressed, "No. 000, c/o PHOTOGRAPHY AND
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DEPOSIT SYSTEM.—Persons who hesitate to
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Deposit System. If the money be deposited with
PHOTOGRAPHY AND Focus both parties are advised
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and acceptance of the goods, the money is for-
warded, less a charge of 1/- for registration. The
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ADDRESS.—All communications for the Editor
should be addressed: The Editor, PHOTOGRAPHY
AND Focus, 20, Tudor Street, London, E.C.

10 CONTRIBUTORS.—The Editor will be glad
to consider original up-to-date manuscripts on
photographic subjects. All contributions must
be typewritten, or in very legible handwriting,
on one side of the paper only, and should bear
the name and address of the sender. Letters or
communications arising out of matters already
appearing in the paper are not paid for. The
Editor disclaims legal responsibility for the
safety of matter submitted to him, but he will
endeavour to return rejected manuscripts, etc.,
when a stamped addressed envelope is enclosed
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for publication, with or without letterpress, photo-
graphs of special interest, on terms to be arranged.

PAYMENTS.—Articles and illustrations are paid
for on acceptance.

INTERVIEWS.—The Editor will be at 20,
Tudor Street, on Wednesdays, between the hours
of 9.30 and 11.30 a.m., but can only be seen at
other times by appointment.



THE RAJAR CAMERA for June has
been won by Mr. J. W. Leake, of 2a,
Dulverton Road, Leicester. The paper
was purchased from Mr. A. Newton,
King Street, Leicester.

**SOUTH SHIELDS PHOTOGRAPHIC
SOCIETY.** The honorary secretary is
now Mr. Edward Smith, of 83, Marl-
borough Street, South Shields.

ILFORD PHOTOGRAPHIC SOCIETY. Mr.
Donald S. Parsons having resigned the
honorary secretaryship of this society,
Mr. T. M. Weaver, of 69, Elgin Road,
Seven Kings, Ilford, has been elected
in his place.

THE CRITERION COMPETITION held by
the Birmingham Photographic Co.,
Ltd., of Criterion Works, Stechford,
near Birmingham, closed on June 30th,
and has resulted in the following
awards: First prize (£2 2s.), E. S.
Pugh, 31, Belsize Road, South Hamp-
stead, N.W.; second prize (£1 1s.),
W. H. London, Egerton Cottage, Berk-
hamstead, Herts.; third prize (10s. 6d.),
Rev. E. Travers Clark, Washfield
Rectory, Tiverton, Devon. Fifty con-
solation prizes of 2s. 6d. each were
also awarded.

Books for Photographers. .

Science and Practice of Photography.

By CHAPMAN JONES, F.I.C., F.C.A., F.R.P.S.
Price 5/- nett. Post free 5¼.

Instruction in Photography.

By SIR WILLIAM ABNEY, K.C.B.
Price 7½ nett. Post free 7½.

Practical Orthochromatic Photography.

By ARTHUR PAYNE, F.C.S.
Price 1/- nett. Post free 1½.

Successful Negative Making.

(Illustrated.) By T. THORNE BAKER, F.C.S.
F.R.P.S.
Price 6d. nett. Post free 7d.

All About Enlarging.

(Illustrated.) By C. WINTHORPE SOMERVILLE,
F.R.P.S.
Price 6d. nett. Post free 7d.

Photography Made Easy.

(Illustrated.) By QUI-VIVE.
Price 6d. nett. Post free 7d.

Lantern-slide Making and Exhibiting.

(Illustrated.) By JOHN A. HODGES, F.R.P.S.
Price 6d. nett. Post free 7d.

Pictorial Landscape Photography.

(Illustrated.) By J. C. WARBURG.
Price 6d. nett. Post free 7d.

A full list sent on receipt of a postcard.

ILIFFE & SONS LTD.,
20, TUDOR ST., LONDON, E.C.

THE LAST SCOTTISH SALON made a
profit of close upon £60. This has
been handed over to the Scottish
Photographic Federation.

MESSRS. NEWMAN AND GUARDIA in-
form us that during August a special
display of "N. and G." goods will be
made in Cowes, Ryde, and South-
ampton, so as to bring them under the
eyes of the yachting fraternity.

THE BARTON PICTORIAL POSTCARD
Co., of 15, St. James's Barton, Bristol,
has sent us some specimens of its collo-
type postcards, which it is prepared to
make from negatives or prints at very
reasonable prices. The cards, both
plain and coloured, are very bright and
effective.

MESSRS. W. BUTCHER AND SONS'
Annual Outing. This took place on the
18th inst., the rendezvous being the
Dumb Bell Hotel, Taplow. After a
pleasant afternoon on the river tea was
taken, and then the sports in connec-
tion with the Camera House Athletic
Club were held.

EASTMAN KODAK CO., OF NEW
JERSEY. In addition to the usual
quarterly dividends of one and a half
per cent. (being at the rate of six per
cent. per annum) upon the outstanding
preferred stock, and of two and a half
per cent. (being at the rate of ten per
cent. per annum) upon the outstanding
common stock, the directors have de-
clared an extra dividend of two and a
half per cent. upon the common stock,
all payable on October 1st to stock-
holders of record on August 31st.

OLD EDINBURGH. The annual ramble
of the survey section of the Edinburgh
Photographic Society took the form of
a walk round the line of the old walls
of the city, and a visit to Heriot's
Hospital. The oak panelling and old
paintings on the walls of the Council
Chamber, which has been in use since
the building of the "Hospital" in
1659, the massive carved stone mantel-
pieces in the kitchen, and the carved
oak pulpit in the chapel were all much
admired, as was also the quaint carv-
ing round the quadrangle and on the
front of the building.

THE NORTHERN EXHIBITION is to be
held in the City Art Gallery, Man-
chester, from the 6th to the 27th
January next. The prospectus has
just been issued, and can be obtained
on application to the honorary exhibi-
tion secretary, Mr. S. L. Coulthurst,
of Broad Oak Road, Worsley, Man-
chester. There are four classes—(1)
pictorial photographs, (2) pictorial
photographs in colour, (3) pictorial
lantern slides, and (4) colour slides,
Autochromes, etc., a classification which
at least suggests that "colour slides,
Autochromes, etc.," cannot be pictorial.
The judge is Mr. J. C. S. Mummery,
at whose disposal fifteen specially
designed decorative plaques will be
placed.

The "Klito" Hand Camera

NOTE THE NAME
VERY CAREFULLY.

THERE ARE NO BOX
FORM CAMERAS
SO DESERVEDLY
POPULAR.

The "Klito" Hand Camera is the most popular magazine plate camera in the world.

Tens of thousands have been sold and the demand is as big as ever.

There must be a reason for this continued popularity, and you will do well to look at a "Klito" before you purchase a new camera.

Look at the finish, the simplicity of the movements, test the reliability of the changing movement with a dozen plates, note the range of speeds on the shutter, and observe also that you can always **adjust** these speeds so that you can keep the shutter up to the mark.

Note too that the "Klito" is British; built in London and made entirely of wood, and well made too with all the joints clamped. That's the secret of the "Klito's" popularity.

Let us send you (free) an illustrated catalogue of the cameras we make and your dealer sells. A postcard will do to make the application on.

HOUGHTONS

The Largest Manufacturers of Cameras and
Photographic Apparatus
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**All
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No. 0 "KLITO," WITH RAPID
RECTILINEAR LENS . . . 21/-



No. 00 "KLITO," WITH ENSIGN
SYMMETRICAL LENS F/8 . . . 25/-

HOLIDAY INFORMATION.

Notice to Enquirers.

SINCE the publication of the list of places with reference to which we were prepared to supply holiday information, we have been literally inundated with applications or the reports. We are dealing with these as quickly as possible, and hope to have all sent off before the end of this week.

IMPORTANT NOTICE.—While requests for reports have been so plentiful, comparatively few readers have troubled to send in reports of the districts in which they live, or with which they are familiar. Will applicants kindly note therefore that in future to secure a report on any district or place, their application must be accompanied by a stamped addressed envelope, and be an adequate report on some district with which they are familiar. If reports on two or more places are wanted, an equal number of reports must be sent. The reports should be from three to six hundred words in length, should specify the places to be visited where photography can be done, how they can be reached, and any regulations as regards photographing, and should give names and addresses of dealers selling materials or providing dark rooms. Ordinary guide-book information, details not of special photographic interest and glowing eulogies of a general character, should be omitted. *The report should give just the kind of information about the place that the sender would like to find in the report for which he asks.*

No notice can be taken of any applications that do not comply with these stipulations.

KESWICK.

Can you give me any information as to the photographic possibilities of Keswick?—W.H.C.

Keswick, a town of some 5,000 inhabitants, may be made the headquarters for a visit to the Lakes. It lies on the left bank of the river Greta, and the shore of Lake Derwentwater is only a few minutes' walk from the centre of the main street. The road leading past the boat landing on the lake takes one to Friar's Crag, on which stands the Ruskin Memorial, from which point a fine view of the lake with its well wooded islands can be obtained. Ruskin described this view as one of the three finest in Europe.

A good road encircles the lake passing Barrow Force, Lodore Falls about which Southey wrote his well-known poem, "How does the water come down at Lodore?" Grange Bridge and village, and returning to Keswick by way of Brandellow Park, Portinscale, and Crosthwaite Church, in the churchyard of which is Southey's tomb. The distance round Derwentwater is about 11½ miles.

The circuit of Bassenthwaite lake is a nice cycle ride of some eighteen miles, passing Grisdale Pike (1,563 feet), then through Wythop Woods to Peil Wyke, across the north end of the lake, over Ouse Bridge to the village of Bassenthwaite, by Mirehouse and Dodd, and along the base of Skiddaw back to Keswick. If one is walking the ascent of Skiddaw may be made on the return journey.

A walk teeming with subjects for the camera is that to Ashness and Watendlath, then a stiff climb over the mountain ridge (about 1,000 feet above sea level) and an abrupt descent into the Borrowdale Valley near the village of Rothwaite, after which one can proceed homewards by Lodore.

Brundholme Woods are also well worth a visit; also some of the lead mines in the district.

In the season coaches start daily to Buttermere *via* Honister Pass, also to Ambleside and round Derwentwater, Bassenthwaite, and Thirlmere lakes, and to various other places of interest. A wet day may be profitably employed by a visit to one or two of the lead pencil mills, the Museum, Art Gallery, Ruskin Linen Industry, or the School of Arts and Crafts.

Good private lodgings may be had in the town, but application should be made beforehand, the prices charged varying with the accommodation needed and the time of year, say 5s. per head per day inclusive, or from 20s. to 30s. per week for bedroom and sitting room in the better class houses, that is, during the greater part of the season; but in the latter part of July and the beginning of August prices are somewhat higher, owing to the increased demand for rooms by visitors to the Keswick Convention, an annual religious gathering. There are several good hotels, including two or three temperance. The leading makes of plates, films, and sundries are stocked by J. Cowper, Ltd., 23, Main Street, and T. W. Townley, chemist, Market Square, who both provide dark rooms.

BARMOUTH.

Particulars of Barmouth and district would greatly oblige.—J. S. DYSON.

Barmouth, with a fine sea view before it, mountains behind, a glorious estuary running five or six miles inland, and Cader Idris within easy distance, affords an endless supply of "subjects" for the photographer. One of the advantages of its situation is the nearness of the hills. After a walk of only five minutes one is on an ascent which leads gradually up to a height of 2,467 feet above sea level.

The town itself contains little to interest the visitor except its new church, which is one of the finest specimens of architecture in Wales. It has a fleet of pleasure boats, and there are steamers which make occasional excursions in Cardigan Bay. There is good fishing, both freshwater and sea.

The following excursions can be recommended: Panorama Walk two miles, Llanaber Church two miles, Cors-y-Gedol five miles, Llanbedr seven miles, Harlech with its castle ten miles, Dolgelly with the Torrent Walk ten miles, Cwm Bychan Lake thirteen miles, and the Roman Steps fifteen miles.

The hotel charges are moderate, and the following can be recommended: The Marine Hotel, St. Ann's Mansion, Orielton Hall, Lion Hotel, Gwalia Private Hotel, and Talydom Private Hotel. Mr. D. E. James and Mr. H. Wynn Williams are chemists who stock photographic apparatus and materials. Both have dark rooms.



Terra-cotta Tones on Bromide Prints.

The method of toning described below will be found to turn a good black and white bromide print into one of a rich terra-cotta colour. After fixing and washing free from hypo the print is immersed in the following solution until it is bleached right through:

Potassium bichromate	150 grains
Hydrochloric acid	2 drachms
Water	10 ounces

It is next washed until all trace of yellowness in the whites has disappeared, and is then darkened in

Schlippe's salt	30 grains
Water	3 ounces

It is then washed.

Burnishing Preparation.

Mounted prints before they are put through a burnisher must have their surfaces treated with a suitable lubricant, such as the following:

Castile soap	40 grains
Methylated spirit	8 ounces

The soap should be shredded as fine as possible and placed with the spirit in a bottle which is stood in a vessel of hot water. The cork should be left out until the water has gone quite cold. The bottle must be shaken from time to time, until all the soap has dissolved. It is best kept in a well-corked bottle, and applied to the face of the print with a fluffless clean rag.

The Smell of "Stinker."

Those who find the smell of the sodium sulphide solution used for toning bromide prints objectionable will no doubt have noticed that it is most offensive when it has been poured down the sink. Messrs. Griffin pointed out, some time since, that by pouring a little of a weak solution of permanganate into the dishes and down the sink immediately after they have had the sulphide, the smell is destroyed.

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BEGINNERS' COMPETITION.

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PRIZES.

First Prize.—A signed copy of "The Complete Photographer," a half-guinea work by Mr. Child Bayley, now in its second edition.

Second Prize.—A free subscription to *Photography and Focus* for twelve months.

One or more certificates of honourable mention will also be awarded.

RULES.

(1) Each competitor can send as many prints as he likes, but each print must bear on the back the coupon, published each week, the name and address of the sender, the title of the picture, and no other writing whatsoever.

(2) No print will be eligible that is larger than 5 1/4 in. x 3 1/4 in. (postcard size) or 5 in. x 4 in.

(3) No print must be mounted.

(4) No handwork other than simple spotting is permitted on negative or print, nor shading or dodging of any kind. It is distinctly understood that entry in the competition implies a declaration by the competitor that this rule has been complied with; and in case of dispute the editor shall have the right to call for the negative, from which the entry purport to be a simple direct contact print.

(5) No prints will be returned, and no correspondence with regard to the competition can be undertaken.

(6) The publishers of *Photography and Focus* shall have the right to reproduce, without payment, any of the prints sent in, winning or otherwise. But except the winning prints, the names of competitors of other prints that may be reproduced will not be published without the competitor's consent.

(7) All entries must be addressed "Beginners' Competition," the Editor of *Photography and Focus*, 20, Tudor Street, London, E.C., and must be delivered at that address by the first post on the closing date at the very latest.

CLOSING DATE.—Friday, July 31st.

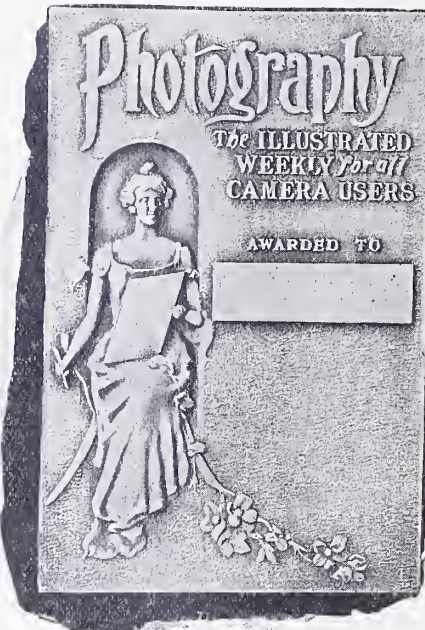
TITLE COMPETITION.

The picture for the current title competition will be found on page xxx. this week, and the rules and coupon on page xxxviii.

Entries close on Friday, July 31st.



"Photography" Medal. Actual size.



"Photography" Plaque. Actual size.
Weight in silver over three ounces.

ADVANCED WORKERS' PRINT COMPETITION.

PRIZES.

First.—"Photography" Silver Plaque.
Second.—"Photography" Bronze Plaque.
Third.—"Photography" Bronze Medal.

One or more certificates of honourable mention will also be awarded.

RULES.

(1) All photographs must be sent addressed "Advanced Competition," the Editor of *Photography and Focus*, 20, Tudor Street, London, E.C., postage paid, to reach there not later than the first post on the closing date, and must contain a stamped addressed envelope or label (not loose stamps) if they are to be returned.

(2) Each photograph must be mounted, but not framed. Prints in slip-in mounts are not eligible. Each must bear on the back the name and address of the sender and the title of the picture. No letters or other communications must be enclosed with the prints. Every print must bear attached to its mount a coupon for the competition of the month, which will be found in each issue of the paper.

(3) Each photograph must be the work of the competitor as regards selection and arrangement of the subject, exposure and development of the negative, and printing, development or toning, and mounting of the print.

(4) The prints which are accompanied by stamped envelopes or labels will be criticised by post, and the editor shall have the right to reproduce any of the prints, winning or otherwise. The awards will be made a fortnight after the closing date.

(5) Awards may be increased or withheld at the absolute discretion of the judge, and in all cases of dispute the decision of the editor will be final.

(6) There is no restriction as to the eligibility, except as set forth in these rules, and except that the same negative must not be used more than once in the competition. That is to say, that a print from it once submitted, all further prints, however varied, are ineligible.

(7) Neither editor nor publishers of *Photography and Focus* shall be held in any way responsible for the safety of prints, or for their return to the competitors.

(8) The sending of a print to the competition will be regarded as a declaration to the effect that it is eligible under these rules, and that the competitor agrees thereto.

CLOSING DATE.—Friday, July 31st.

SPECIAL SUBJECT COMPETITIONS. OPEN TO ALL READERS.

PRIZES.

First Prize.—"Photography" Plaque in Silver.
Second Prize.—"Photography" Plaque in Bronze.
Third Prize.—"Photography" Medal in Bronze.
One or more certificates will also be awarded.

RULES.

(1) The subject of each photograph entered must be that announced for the particular competition.

(2) Each competitor can send as many prints as he likes, but each print must bear on the back the name and address of the sender, the title of the picture, and no other writing whatsoever. Each print must have attached to it a coupon for the competition of the month, which will be found in each issue of the paper.

(3) No print must be mounted. No handwork other than simple spotting is permitted on negative or print, nor shading or dodging of any kind. It is distinctly understood that entry in the competition implies a declaration by the competitor that this rule has been complied with; and in case of dispute the editor shall have

the right to call for the original negative, from which the entry purports to be a simple direct contact print.

(4) No prints will be returned, and no correspondence with regard to the competition can be undertaken.

(5) The publishers of *Photography and Focus* shall have the right to reproduce, without payment, any of the prints sent in, winning or otherwise. But except the winning prints, the names of the senders of other prints that may be reproduced will not be published without the sender's consent.

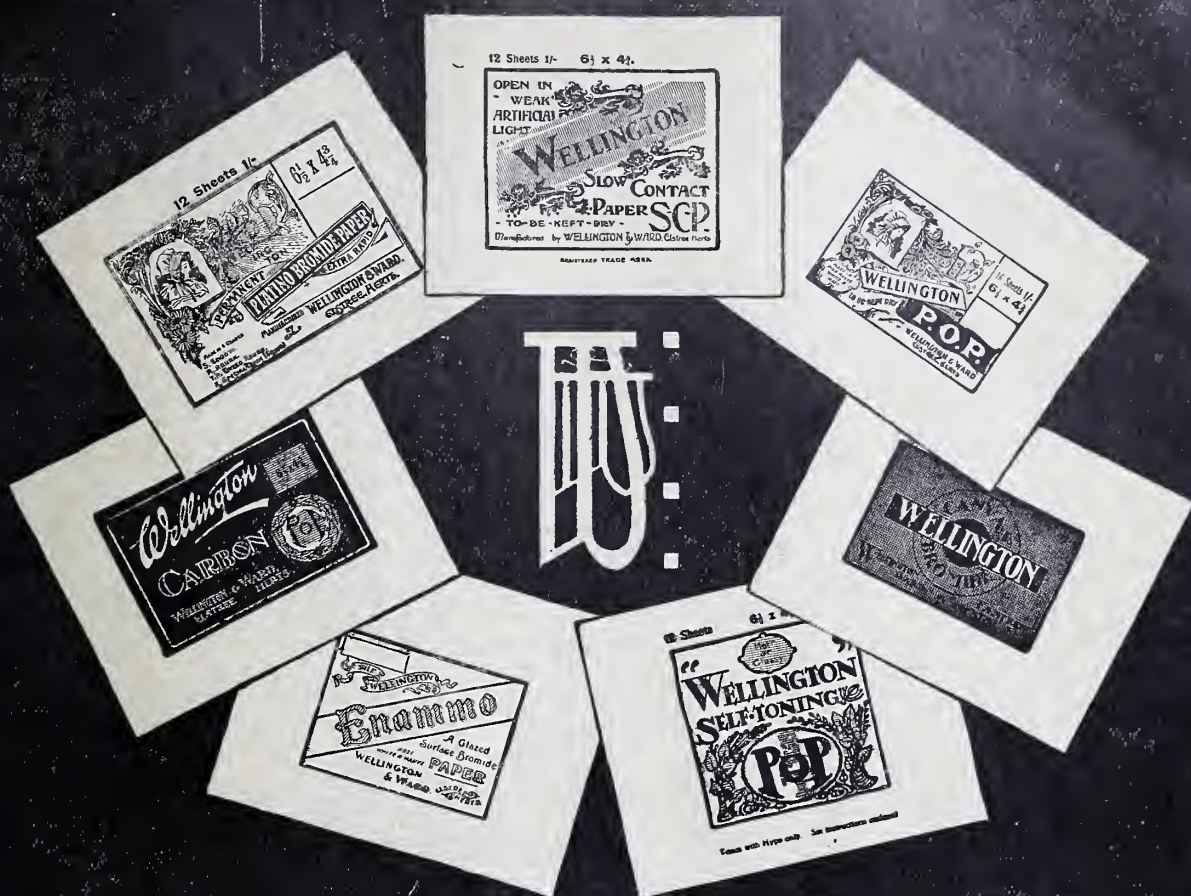
(6) All entries must be addressed "Special Subject Competition," the Editor of *Photography and Focus*, 20, Tudor Street, London, E.C., and must be delivered at that address by the first post on the closing date at the very latest.

SUBJECTS AND CLOSING DATES

A Plant, or Flower, taken growing out of doors. Closes Friday, July 31st.

A Harvest scene. Closes Monday, August 31st.

A Seaside Scene. Closes Wednesday, September 30th.



Wellington

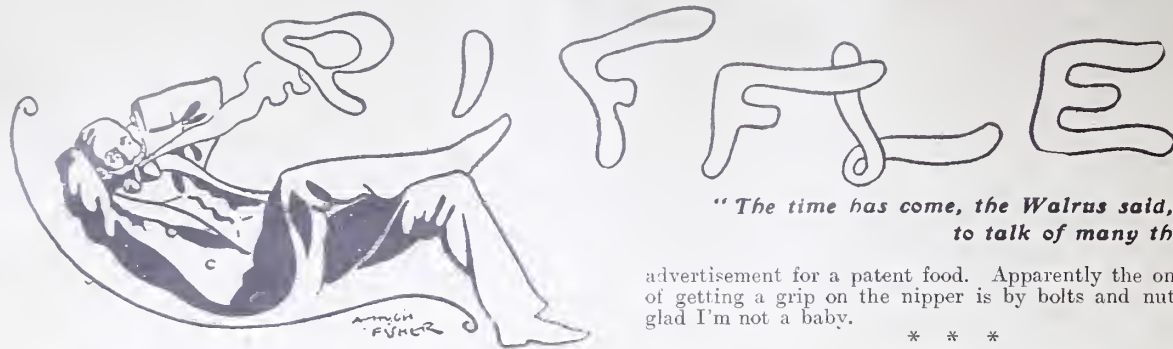
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"The time has come, the Walrus said,
to talk of many things."

advertisement for a patent food. Apparently the only means of getting a grip on the nipper is by bolts and nuts. I am glad I'm not a baby.

* * *

I'l is many years since I ventured into a professional photographer's studio. Such a place always gives me the jumps. I can't even stand taking my own portrait. I took myself some time ago by lamplight to find out what sort of an exposure was necessary, and what the result would be like. I solved both problems. Focusing a chair, I opened the lens, leaped into the seat, and fixed my eyes on a particular spot on the wallpaper. I counted seconds for three minutes. Long before the time was up the wall had disappeared into utter darkness, out of which presently appeared stars, then fireworks, then fiery serpents and luminous hobgoblins. My hair stood on end and turned grey, and my eyes stood out on long wavy stalks like a snail's. The result was not a success as a portrait, although it figured out all right as an illustration to Dante's "Inferno."

* * *

Even when a friend photographed me a month or two ago I had a bad time of it, and spoilt all his plates except one. He made a chalk mark for me to look at, and I had no idea till then what a chalk mark was capable of doing in the short space of five seconds. I suppose the mark was intended to keep my eyes fixed on one spot. If so I should like to know why it stood on its head and then began to turn somersaults all over the place.

* * *

Although, as I say, I instinctively avoid photographic studios, I believe such places are quite surprisingly fitted up and equipped compared with what they used to be years ago. I know that it was the usual thing when a baby was being taken for the mother to kneel down behind the chair in which it sat, and get a precarious hold of such garments as she could reach. The resulting portrait generally showed a very small and horribly blurred baby, flanked by two huge hands whose ownership was suggested by an enormous chignon appearing above the back of the chair. Sometimes, at the critical moment when the operator had removed the lens cap, the ambushed mother would take a fresh grip, and, grabbing some baby as well as clothes, the juvenile squatter would leap into the air with a frantic yell. At other times the precarious hold on the garments would give way at the crucial moment, and the kid would pitch off the chair on to its bald head with a thud that would make every pane of glass in the studio rattle.

* * *

But now I see from an American paper that for seven and a half dollars a photographer can purchase an Invisible Baby Holder. It is not very apparent why a photographer should want a holder for an invisible baby. It is generally the visible, audible brat that wants holding. Perhaps the idea is that the holder, and not the baby, is invisible. The illustration of the article suggests a medieval instrument of torture, or a patent man trap. It can be adjusted to any accessory in the studio, so that there seems no reason why the baby should not be taken balanced on its head on the dummy sundial, or stuck up on a sky background like a bluebottle. It will hold children up to six years old. All I can say is that anything that will hold a new baby tight and quiet till it attains its sixth birthday is dirt cheap at thirty bob. I have known baby-holders costing ten shillings a week and their keep who did not know which end of the baby to hold uppermost.

* * *

Judging from the illustration the baby holder cannot be very comfortable. It is made entirely of metal, with edges and corners calculated to give any child made of flesh a perky time of it. I can't imagine how it would get a grip on a youngster photographed in "the altogether" like an

There are many other things in the modern studio which were quite unknown years ago. It was not considered incongruous then to put the victim in front of a forest background, with a carpet for the ground, and a very fancy table in the front of one of the trees. It was even considered rather *chic* to represent a boy rowing an impossible boat across an unconvincing drawing-room into a grossly improbable bookcase. But now some of the studio accessories are marvels of adaptability. You can buy rugs that represent a tiger skin when brushed smooth, grass when ruffled up, and a lake when you turn them over. You can get a background that shows a fine baronial hall till you turn it upside down, when it represents a rock-bound coast. You can obtain wood and canvas contraptions that will do duty as the stone steps at Haddon Hall, a ship's mast (for boys in sailor suits), a motor car, a Louis XVI. settee, a castle dungeon, or the summit of the Matterhorn. There are papier maché swans to swim on the lake side of the grass-tiger-skin rug with a reflection of the swan for half a crown extra.

* * *

In some studios there are gorgeous mechanical toys that arouse the interest of the most blasé youngsters. When I was a nipper the poor operator tried to coax up an attentive expression by gambolling about like a demoniac goat; or else he told a bare-faced lie about a non-existent dicky-bird that was about to soar into the empyrean from the interior of the ramshackle old camera. I believe there are now professional photographers so luxuriously up-to-date that they use dark slides in which the plate can be safely carried into the dark-room without the protection of the operator's coat tails. If things go on at this rate the time may come when the professional photographer is actually able to turn out a decent portrait—one that does not fill the ordinary observer with dismay, and that does not necessarily induce an attack of apoplexy in every beholder of artistic perceptions. I say the time may come. But I don't think it will. And meantime I shall continue to pass by every studio on the other side of the road.

* * *

My favourite way of being photographed is to be done when I don't know about it. Where ignorance is bliss 'tis folly to be wild about it. Afterwards, when you are shown a print you can be as wild as you like, and with very good reason. But it is quite possible then to come to terms with the surreptitious snapper. If he won't sell the negative the best plan is to lay for him yourself and get something horribly compromising, and then exchange negatives with him. I never mind who takes shots at me on the sly. If the result is good I accept a print; if not, I retaliate, and the potshottist is invariably only too glad to come to terms.

THE WALRUS

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PHOTOGRAPHY. AUGUST 4TH, 1908.

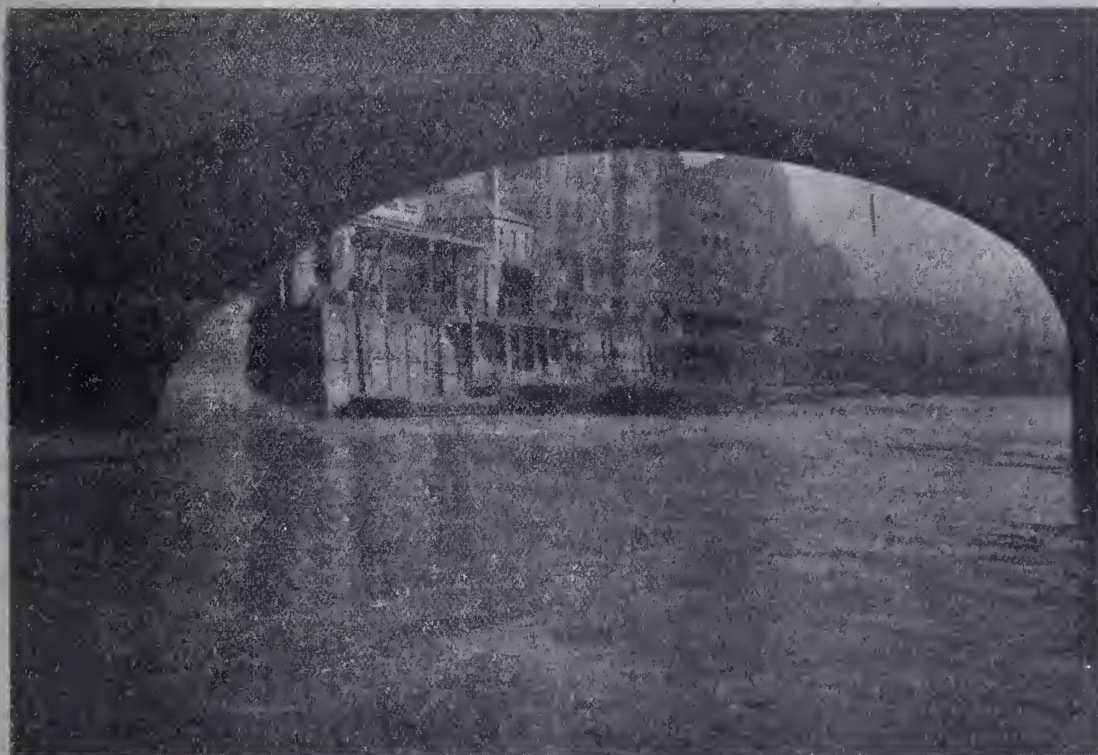
PHOTOGRAPHY

A JOURNAL FOR EVERY CAMERA USER.

EDITED BY R. CHILD BAYLEY.

PUBLISHED WEEKLY.

AUGUST 4TH, 1908. TUESDAY. No. 1,030. Vol. XXVI.



LONDON BRIDGE.

BY REV. H. W. DICK.

EDITORIAL

Holiday Reports.

We felt compelled to announce last week that a report on any district would in future only be sent in exchange for a report by the applicant dealing with some district with which he was acquainted. The success of the scheme depends absolutely upon securing an adequate series of reports, and this condition will, we hope, ensure it. In future if a reader wants a report about a district he hopes to visit he should be able to get it in exchange for his own report on another district. Such reports should be brief and to the point. Information as to the actual things to be seen and places to be visited is sure to be useful. In the same way, it is better to give the name and address of one chemist or dealer who supplies materials or provides a dark room than to write that there are many excellent establishments where a large stock of all kinds of photographic material is kept. Not that the sender need limit himself to one name: far from it. But one, in such a case, is better than a vague generality. Will those who can supplement the information already sent us, please do so?

Replacing Broken Negatives.

When a negative has been broken there is a very natural tendency to regard the occurrence as bringing to an end all prospects of dealing with the subject on it. But if it is one which cannot easily be replaced—and somehow it always seems as if these alone are the negatives which get broken—there is always a possibility of recovering it, provided we have got a good P.O.P. print from it. The fact that a very fair negative indeed can be made from a glossy surface P.O.P. print is one which is frequently overlooked. The second negative will not be quite so good as the first. That is not possible; as every photographic operation involves a certain loss of quality, but it ought not to be so much worse as to make any very great difference.

There are two ways of utilising the print as the basis for a new negative. One is to place a piece of clean glass in a printing frame, to put the unmounted print on it, face upwards, to put down upon it a dry plate, a slow one, or, better still, a lantern plate, to replace the back of the frame, and to make an exposure in this way, using the print as a negative. With a slow lantern

plate the exposure to an ordinary gas burner at a distance of eighteen inches will generally be about three or four minutes, but this must not be taken too definitely, as the depth of the print, the thickness and opacity of the paper on which it is made, and the extent to which it was toned will all influence the result. The frame should be moved about during the exposure, so as to minimise the chance of any grain of the paper showing. Some is sure to be visible in the fresh negative, but if it is printed on a matt surface paper this need not be very prominent. The plate after exposure is developed in the usual way, taking care to carry on

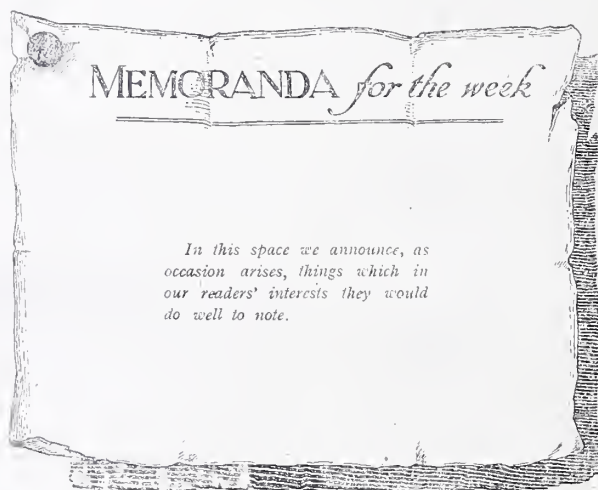
the development long enough to give a sufficiency of contrast; and thus a second negative may be made very simply and very quickly without any of the ordinary troubles of copying.

If the photographer prefers it, he can fasten the P.O.P. print up in a good light, and make his new negative by copying in the camera; but this is a process which is well enough known to need nothing more than a passing reference here. We know one photographer who uses this method extensively,

although not for the purpose of replacing broken negatives. He makes contact prints on P.O.P., printing in the clouds as carefully as he can, until he gets precisely the effect he wants. The silver print is squeegeed on to a piece of clean plate glass, the other side of this is carefully dried, and then an enlarged negative is made direct in a large camera by photographing the still wet print on the glass. By squeegeeing in this way all trouble from graininess in the paper is removed. His exhibited work is usually 12in. by 10in., or thereabouts, and is all made from quarter-plate prints in this manner.

Work for the Survey Societies.

A short time ago we stood on the edge of a low cliff on the East Coast and looked down upon the beach below. There had been a great storm, and the shingle had been swept away to a depth of a couple of feet or more, and there stood revealed, as on a ground plan, the foundations of cottages and other buildings which many years ago had formed part of the township. The unending onslaught of the sea had washed them away and had covered their remains with a pebbly beach, over which a generation had tramped without suspecting



the traces of its forefathers that lay just beneath. The storm came, and the secret was revealed. No photographic record of these vanished villages has been kept. They disappeared before the camera became common; and so the interest which it might have aroused is dormant. The devastation is still going on, slowly but steadily; and it would be well if some of our survey societies were to turn their attention to the recording of those parts of England which are vanishing under our very eyes. At least one village we could name has disappeared almost entirely in the last ten or fifteen years, and its inhabitants dwell further inland; and this is not an isolated case.

If you heard old Newcome "spout" you'd have not the slightest doubt

That inventions, photographic, all are due to him. "I'm an old hand at the game," you will oft hear him exclaim;

There's no process you can mention that is new to him.

He'll remark, "I caught the craze in the good old 'wet plate' days,

When I used to work the process for the fun of it. And my apparatus then, when I used a twelve by ten— Well, there must have been at least a half a ton of it."

He was—at least he states—the inventor of dry plates. And P.O.P. was really first brought out by him.

Many lenses, so he claims, with their long, tongue-twisting names,

Were made to varied formulæ thought out by him.

He asserts he was the means of producing "yellow screens,"

And orthochromatism was conceived by him.

That each process up to date germinated in his pate Is a firm conception which is quite believed by him.

So with bombast of this kind it isn't strange to find A belief in his profundity; induced by him.

Yet it's really safe to bet not a single soul as yet Has ever seen a photograph produced by him.

The Local Application of Bromide.

A writer in the "Western Weekly Mercury" illustrates a little piece of apparatus which he has devised for applying a solution of bromide with a brush to parts of a negative during development, to hold the action back in those parts while it goes on in others. Those who have tried to do this know that while the brush remains wet for some time, it loses almost all the bromide solution it contains as soon as it comes in contact with the negative. To prevent this, a fountain pen filler with its point bent round is tied to the brush, so

that the nozzle of the filler comes against the hairs of the brush. The rubber bulb of the filler is pressed and the tube in this way is filled with the bromide solution, which can then be supplied to the brush as it is required. The method has its uses, especially in the case of portrait work with ladies and children in white dresses; but it requires a good deal of skill to apply bromide so that there is no line of demarcation visible between the part that has had it and the part that has not. Seeing that the work has to be done in the dim light of the dark room, and done against time, as the development, of course, is going on while the brush work is being carried out, it is very doubtful whether as good an effect cannot be got with more certainty and ease by handwork on the finished negative. The latter, too, has the advantage that if it is unsatisfactory it can all be cleaned off and started afresh, while any tampering with the plate during development is irrevocable.

For Imitation.

Every right-minded amateur photographer will be in hearty agreement with "John Bull" in its comment on an incident which occurred at the Eulenberg trial at Berlin. A number of press photographers annoyed a lady after a sitting of the court, and received a good thrashing with walking sticks. Our contemporary considers that this is an example for imitation; and suggests that it is high time that some drastic action were taken with regard to "camera fiends" in this country. Much of the inconvenience and restriction under which amateur photographers labour has been brought about by the complete want of tact and decency manifested by those who take photographs for the papers; and some limitation or other will have to be imposed before long. Our contemporary says: "We are not sure that people do not possess a copyright in their own faces"; but this is, unfortunately, an error. No such copyright can exist under the present law, unless the face were a "painting" and registered as such at Stationers' Hall; and while there are many faces which might deserve to rank as works of art rather than nature, the "author of the work" has not gone so far as to secure legal protection by registration.

Joking apart, it has been decided in the United States Court that a person has rights in his own appearance, and that, for example, a portrait of a lady cannot be used for advertising purposes without her consent, even if the advertiser has secured such copyright as exists in the portrait. We should like to hear that the law in this country would give some similar protection to the individual against annoyance from the unauthorised publication of his or her portrait.

THE WEEK'S MEETINGS.

MONDAY, AUGUST 3RD.

Catford & Forest Hill P.S. Broadstairs.
North Middlesex P.S. Ware.
Windsor P.S.

TUESDAY, AUGUST 4TH.

Nelson C.C. "Views and Pictures." L. Ashworth.
Nelson P.S. Print Evening.
Govan C.C. Business Meeting.

SATURDAY, AUGUST 8TH.

Dennistoun A.P.A. Old Kilpatrick and Erskine Ferry.
Hull P.S. Hessele and Ferryby.
Ashton-under-Lyne P.S. Donkey Bridge Wood, Rose Hill.
Attercliffe P.S. Deepcar, for Ewden Valley.
Blackpool and Fylde P.S. Little Marton and Weeton.
Wallasey A.P.S. Brimstage.
North Middlesex P.S. Loughton and Chigwell.
South Suburban P.S. Sevenoaks.
Tolmorden P.S. Hardcastle.

Societies will have their meetings announced here if the syllabus is sent to us at the beginning of the Session, or from time to time.

THE PHOTOGRAPHY

OF DOORWAYS

By E. W. Jackson.

ONE often sees the advice given to amateur photographers that they should go in for specific work of some kind; and doubtless there is a more lasting interest in one's photography when it is pursued with some definite aim. Of course, we are restricted to some extent by our en-



Special to "Photography and Focus."

vironment. The city man can hardly, as a rule, have the same advantages with regard to sea pictures as one who lives at the seaside, and the coast dweller does not, as a rule, go in for nature studies. But no photographer is without opportunities for some kind of specialisation.

In ecclesiastical buildings alone there is sufficient material for an inexhaustible amount of work of a special nature—miserere seats, ancient fonts, bench ends, windows, monumental tombs, sundials, ornamental knockers, and last, but by no means least, beautiful and interesting doorways.

There is something very attractive about an old doorway; and examples in plenty are to be found in almost every neighbourhood. In fact, one is more likely to be troubled with an *embarras de richesse* than with any difficulty in finding picturesque and beautiful doorways. The builders of our ancient cathedrals and abbeys bestowed especial care on their doorways. They seemed determined that the entrances to these vast edifices should be noble and attractive. As we gaze on their open portals we see in imagination the shades of those who were wont to cross the threshold in days gone by. The cathedral doorway is often the keynote, so to speak, of the whole building; the rich and elaborate carvings which are common features are generally in keeping with the style adopted throughout the structure.

Doorways interest us too because in them we can distinguish the gradual development of the various architectural styles, ranging from the Early Saxon to the elaborate and ornate Decorated and Perpendicular periods. Few Saxon doors now remain. They were usually of rude design, the arch sometimes forming a triangle. The semi-circular arch was a feature common to all Norman doorways (see illustration No. 3), and in these, as a rule, there was little or no ornamentation. The pointed arch was the principal feature of the Early English period. In the Perpendicular period the arches became flatter, and were surrounded by a square frame. The spaces between this and the arch itself—the spandrels—were usually freely ornamented with carving. The doors



Wells Cathedral. Doorway of the Chapter House.

By F. H. Cliffe.



THE PHOTOGRAPHY OF DOORWAYS.

BY E. W. JACKSON.

1. Gloucester Cathedral, 2 and 4. Hereford Cathedral, 3. Kirkstall Abbey, Yorks 5. Feukesbury Abbey, 6. Malvern Priory Church.

were frequently set in large porches, which were also elaborately carved. The south porch of Gloucester Cathedral represents a fine example (see illustration No. 1).

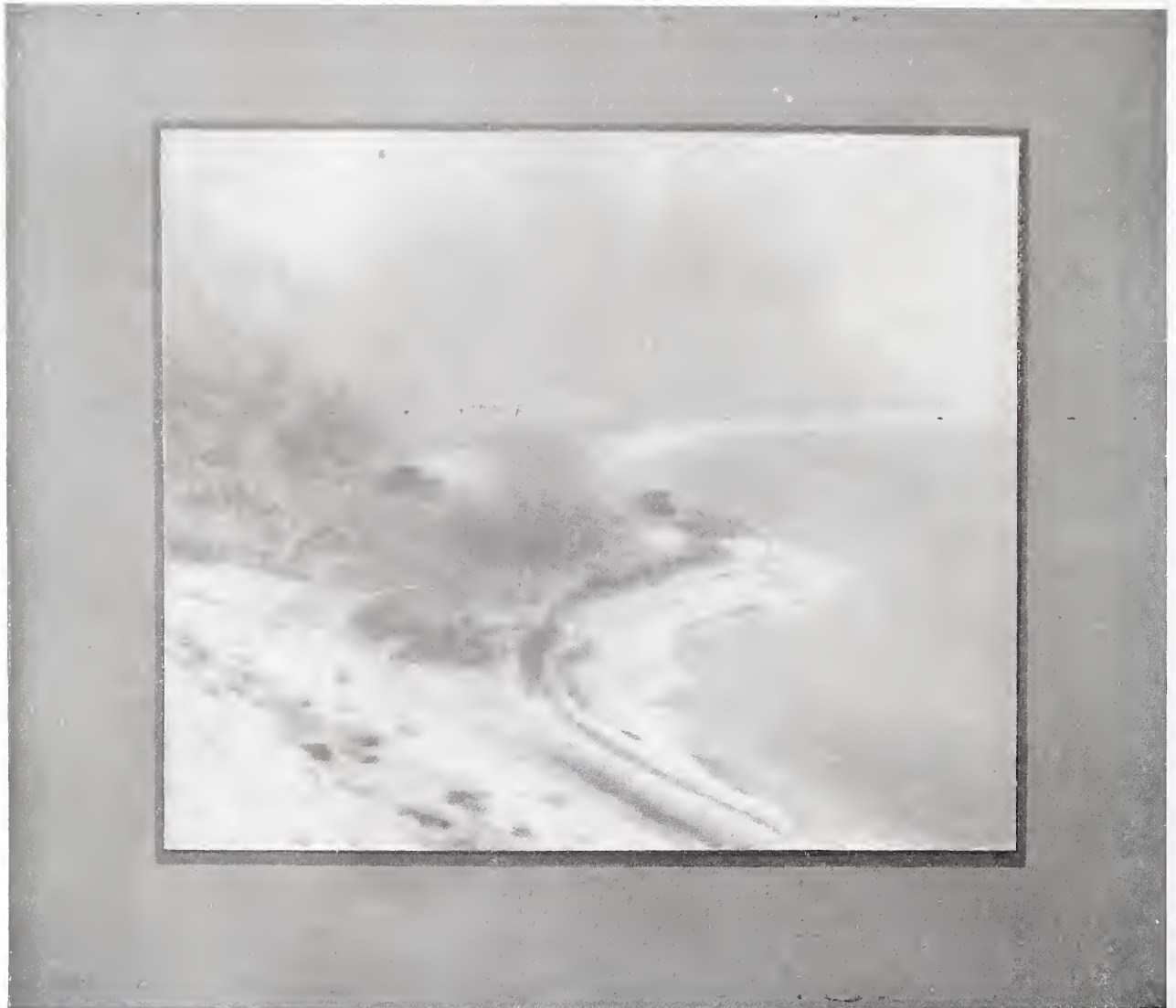
Then, apart from their architectural value, doorways are very attractive from a pictorial point of view. The play of sunlight through an open door, with perhaps a glimpse beyond into the interior of the building, has often a charming effect; and if we can introduce a well-posed and suitable figure, additional attractiveness is gained by the human interest which is lent to the scene. The figure is useful also (if placed in close proximity to the door) to enable us to estimate the relative size of the doorway with its surroundings.

It is seldom advisable to photograph a doorway from a position directly in front. The camera should be placed a little to one side. This tends to give more variety of line from the altered perspective. A stand camera is undoubtedly preferable for this class of work. As the camera has frequently to be pointed upwards in taking large doorways and porches, the swing-back will often be brought into requisition. A level, too, will be found useful.

As a further aid to pictorial effect an effort should be made to show an attractive foreground in doorway pictures. Nothing looks worse than to see a doorway or porch cut off close to the base of the structure. A few steps, some foliage, or a play of light and shade may make all the difference in the world between an uninteresting and a picturesque representation.

Many doorways have deep arched recesses which are partially in the shade, and allowance should be made for that when making the exposure. The good old rule is—expose for the shadows and let the high lights take care of themselves.

In development also, care must be taken to avoid harsh contrasts, i.e., brilliant light and deep shade. To this end the normal strength of the developer may be diluted, or the total time of development kept short. A further most useful "dodge," when printing by gaslight more especially, is to use a tuft of cotton wool at the end of a fine wire. This kept in motion (with a circular action) in front of the darkest parts of the doorway will keep back the exposure to any required extent.



A MOORLAND LAKE IN WINTER.

BY HAROLD A. BLADES.



A CRITICAL CAUSERIE.

By "The Bandit"

Concerning some Photographs by Beginners.

"Critics!—appalled I venture on the name,
Those cut-throat bandits in the path of fame."—BURNS.

"TIS distance lends enchantment to the view," said the poet.

If for "distance" you read "background," the dictum applies with quite peculiar force to the sort of pictures which it is my business to talk about on this page. Not all of them possess strict "distance," but it is hardly possible to escape the presence of both distance and background. And a good background is half the battle; while a bad one—well, it lends disenchantment to the view with a vengeance. The function of a good background is to be unostentatious. A bad background jumps forward, hat in hand, so to speak, and rushing to the footlights it monopolises the audience's whole attention, to the total exclusion of the nominal star performer.

Forgive the metaphor. To interpret it, let me present to your notice a print entitled "A Candidate for the Derby." Technically faultless, it suffers from one of these accursedly disenchanting backgrounds—literally disenchanting, for it "gives the show away" mercilessly. It howls to us: "The boy is posed; he isn't really enjoying himself with his rocking horse, he is only being photographed by his papa; look at ME instead of at the boy; I am the



A Lesson at Leisure.

By J. Edgerton.

door of the boy's papa's house; they had to come to ME when they wanted to take a portrait."

There is nothing wrong with the rocking horse, nothing wrong with the nice little lad (except that the artificiality of his situation is plainly weighing on his mind a trifle); and lastly, there is nothing wrong with the skill of the photographer. But that jarring background, insisting to us that the picture does not reflect real life, ruins what would otherwise be a naive portrait-memento, and labels it in staring letters "A Falsity." This background follows the old definition of dirt—matter out of place. By reason of being out of place, it is as artificial as a studio balustrade with a distant view of castle grounds would have been. It is artificial in relation to the rocking horse, that is to say. Or, if you prefer to put it the other way round, the rocking horse is artificial in relation to it.

Natural backgrounds are, however, often as difficult to manage as artificial ones—witness "A Lesson at Leisure." This is absolutely true to life. Alas! it is absolutely true to a wallpaper also. Living year after year in a room

one ends by becoming so inured to the presence of the wallpaper that one does not see it. The camera never fails to see it—and, as it is on a flat surface, to see it with glaring exactitude. Wallpapers as registered by the camera are the nightmare of one's early experiments in indoor portraiture. Indoor portraiture is a grade above outdoor: the novice tackling it feels that he is consciously making a step towards truth and naturalism. Behold, when he brings his dripping negative from the darkroom, and looks at it against the light, the first thing that he notices is not the perfect rendering of his sitter's visage, but the meticulous pattern of roses and honeysuckle (or, worse still, some vegetation unknown to botany) on the wallpaper.

"A Lesson at Leisure" is better than the "Derby Candidate." It not merely aims at Truth, while the "Derby Candidate" is a placid Untruth, but it nearly hits. The child is making a good fight against the wallpaper. She is half winning the battle—but only half. That wallpaper has plenty of kick in it. The lovely simplicity of the child's dress—whose texture is admirably rendered—has no



A Candidate for the Derby.

By L. Holt.

chance. It is swamped by the finicking complications of the pattern behind it. Loudness drowns quietude in the picture, though to the eye the dress and its dainty wearer were probably far more visible than the wallpaper.

The photographer who took this picture presumably sees that wallpaper every time he enters that room now, though before he attempted this portrait he never saw it. He may not particularly enjoy this additional vision; but his powers of observation have been sharpened all the same, and that is something to be thankful for. Every failure in photography is compensated by some lesson learnt; and the typical "bad background failure" trains the eye wonderfully.

The author of "Helping One Another" is determined not to fall into the wallpaper trap, so he has hung up a sheet or blanket which is patternless, and really produced a very pretty result. Will Cadby taught us long ago that the tones of white on white were peculiarly effective in monochrome picture making, and that flesh tones against white need by no means be negroid. Whether the author of "Helping One Another" has ever seen a Cadby print I know not, but he has produced a perceptibly Cadbyesque rendering of his little girls. This similarity gives us some basis of criticism. For the picture is only "Cadbyesque," it is not an undiluted Cadby. And as Cadby is an acknowledged master, we cannot do better than ask ourselves, "Wherein does this picture differ from a Cadby? We have said that it is like a Cadby. So far so good. But in what respects is it unlike a Cadby?"

Well, to begin with, Cadby would never have tolerated the vertical folds in the background. His backgrounds are not backgrounds—they are sheer absences of background. They are negations, blanks, nothings. This effect of nothingness is only produced by having a perfectly un-wrinkled surface of white behind the sitter, and, moreover, having even that un-wrinkled surface so out of focus compared with the sitter that none of its texture is discernible. A perfectly taut blanket would show as a blanket if it were in sharp focus. It would be a gulf of white nothingness if it were fuzzy. The blanket in "Helping One Another" not only reveals itself by its wrinkles, but by being sharpish—in other words, the sitters are too close up against it. Perhaps this



was due to the smallness of the room, in which case it could hardly be helped. At all events, if possible the sitters should have been brought a little out from their background (and the latter stretched taut) and the largest possible stop used.

But worse still are the wrinkles in the sheet on the floor. One may forgive the folds in the background, but one can't forgive so easily the folds on the floorcloth. Carpets don't have folds in them—wall draperies might have. And supposing this were a towel genuinely spread on the floor to save splashes from the washbowl, at an actual ablution, one would see the edge of the towel. The edge of this one melts into the background (as it ought to do), therefore it is no utilitarian anti-splash, but a dodge of pictorialism. As such, it should not draw attention to itself as it does.

Lastly, Cadby would not, one ventures to guess, have used that chair. By hook or by crook he would have got hold of a white-painted chair to maintain the high key of his tone scheme.

The only darkish spots in his picture would have been the hair of the children, and this would have been right, for seemingly the hair is their chief interest at the moment.

The picture is a charming one notwithstanding its weaknesses. It has a flavour of true childhood—a flavour for which its simplicity is to be thanked. This flavour is almost wholly lacking in our final picture, which its author has left untitled. It represents a child standing beside her doll's cradle. Its idea is obviously similar to that of "Helping One Another"—yet how different is the result! The child is self-conscious. No wonder. What preparations have been made for her photographing? A vast curtain has been hung up, a mat spread, her toys have been brought forth—and she has been frightened into wooden-ness. If that doorstep in the "Derby Candidate" gives the show away, the curtain and accessories give this away a thousand times worse, for peeping from behind the curtain, on the right side, one sees—what do you think? Bricks! A brick wall!

Oh dear! A curtain hung against a brick wall; and the author hasn't even taken the trouble to trim off the bit of wall which betrays the fraud! He has been so in love with that horrid artificial-looking box of toys, carefully tilted in order that we can see into it, that he couldn't bring himself



Helping One Another.

By A. W. Hamilton.

to trim it in half, even were it to save the picture's reputation as a "nursery scene."

It would not have been saved, of course—the stiff and formal curtain would have continued to whisper the truth to us, even if trimmed down—but it would, at least, have been an attempt to whitewash the lie.

That peeping margin of brick wall is disenchantment utter and complete. Of the four prints we have considered to-day, the only one in which the background does not wholly disenchant is "Helping One Another," and even it, as has been pointed out, is scarcely all it might be. But in conclusion I may say, for the comfort of the four workers

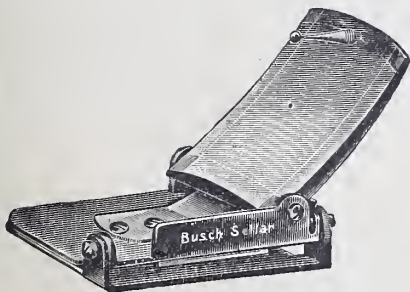
on whom I have been rather hard this week, that out of my basket of prints I might have chosen dozens of other examples, not one of them any better than those reproduced—and most of them infinitely worse. The beginner may have learnt to "mix his developer with brains"; he has not yet learnt to choose his background with eyes.



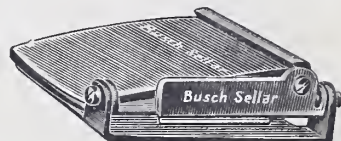
The Busch "Sellar" View Finder and Level.

NOVELTY is the most striking characteristic of the little piece of apparatus illustrated below, which shows one form, the "A" model, of the "Sellar" view finder and level, which has just been brought out by the Emil Busch Optical Co., of 35, Charles Street, Hatton Garden, London, E.C.

The illustration almost explains itself. The finder is made throughout of metal, the main portion is a metal reflector, ground with a double-curved surface known as a "crossed cylinder," which is silvered and highly polished. In this surface is a black dot, and projecting over the dot is a sight. When the eye is placed immediately over the finder, so that the sight covers the dot in the middle of the reflector, the image that at that moment would fall on the plate, if the finder is correctly attached to the camera, will be found to



be exactly identical with that which the eye sees in the finder. The image is a very brilliant one, so that there is no need whatever to cover the finder in. Moreover, there is no reversal of right for left or top for bottom. It is seen the right way round, clearly and sharply. It also, when in actual use on the camera, serves as a level as well as a finder, indicating at a glance whether the camera is tilted or not. The instructions state that the image should be viewed with one eye only, from a position exactly vertical to the centre of the finder. When the camera is held quite level, the ball of the pointer will be exactly over the centre hole in the finder. The surface of this reflector must only be cleaned with a soft rag or leather.



The finder, which is beautifully finished and adjusted, constitutes a distinct advance in this particular appliance. It is constructed in the folding pattern (Model A), which we illustrate, which can be attached to almost any camera with a couple of screws, and Model B, intended for use with folding hand cameras, to the lens board or panel of which it is fitted. The price of either pattern is 6s.

The Cameo Roll Film Holder.

PLATE changing difficulties are responsible for a great share of the popularity of daylight loading cartridges of roll film, with which all such troubles are unknown, and there is a great deal to be said, therefore, for those patterns of camera which can be used at the choice of the photographer either with plates in dark slides or with roll film in daylight loading cartridges, whichever is preferred at the moment.

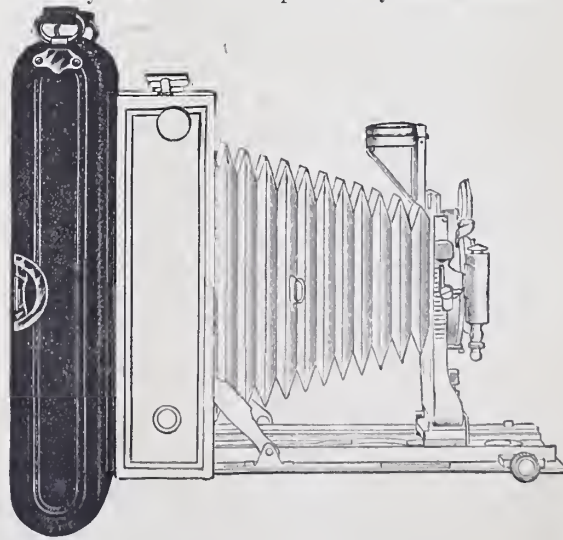
The apparatus shown in the illustration herewith is a plate camera which can be used with roll film, and illustrates the Cameo roll film holder, which has just been put upon the market by Messrs. W. Butcher and Sons, Ltd., of Camera House, Farringdon Avenue, London, E.C.

We have had an opportunity of examining this piece of apparatus, and were much struck by its neat and handy design and by the quality of workmanship. It is an excellent adjunct for the camera for which it is made, and may be heartily recommended.

The apparatus is made to fit on the well-known Cameo cameras of Messrs. Butcher, and slides on in place of the ordinary dark slide. The back of the film holder is removable, and is constructed on similar lines to those of folding roll film cameras, taking right off for the purpose of loading and unloading. The holder takes the ordinary spool of roll film, $\frac{3}{4}$ in. long for quarter-plate size, and is manipulated in exactly the same way as a roll film camera. As it has to be detachable from the camera, just like a dark slide, it is provided with a metal shutter, pulling right out. There is, of course, no need to replace this shutter after each exposure if the shutter on the lens can be set without opening it, and the shutter therefore need only be used when the roll film holder is to be removed from the camera.

The price of this piece of apparatus is 25s.: as the film is not in the same place as the plate, a separate focussing scale

will be required, which can be fitted to the camera at a cost of 3s. We cannot but think that there is a large number of photographers who will be glad to add it to their Cameo cameras, since it widens the scope of their work so considerably, and, especially if they are travelling, is sure to prove very useful. It is particularly well finished and



"classy" in appearance, and is compact, simple, and well arranged.

CHATS WITH A BEGINNER



ON THE MOVEMENTS OF A CAMERA.

IV. The Reversing Back.

By E. LLOYD.

SQUARE pictures are very seldom effective, the great majority of photographs looking best when they are of an oblong shape, with one dimension very decidedly longer than the other. This is recognised in the standard sizes of plates, all of which are longer one way than the other; but it may be mentioned, in passing, that in most of the standard sizes the difference between the two is much less than it might be.

Anyone who looks round one of our leading exhibitions, where every print has been trimmed to the proportions which best suit its subject, regardless of the size and shape of the plate from which it was printed, will notice that quite the majority are more or less of a long narrow shape. The postcard size, $5\frac{1}{2}$ in. by $3\frac{1}{2}$ in., which has rapidly jumped into popular favour, is much closer to the shape of a majority of exhibited pictures than is a quarter or a half-plate, for example.

With plates of these shapes it is important that the photographer should have some means by which he can arrange to turn the plate so that the longest dimension is either upright or horizontal at will. The two positions are commonly distinguished by speaking of a picture taken this way  as being a "vertical picture," and this way  a horizontal picture. The most convenient way of controlling this is by means of what is known as "a reversing back."

A camera fitted with a reversing back has its back frame made exactly square. On this fits another frame, which carries the focussing screen and the dark slide, and as this also is exactly square it can be put in and fastened, so that the ground-glass, and consequently the plate, is either in the vertical or the horizontal position. In the best cameras it is possible to put the reversing back in any of the four positions, and at times this is a great convenience, especially in architectural work. It will then often happen that the camera has to be set up in some confined situation, and must be as close as possible to some part of the building in order that the view that is wanted may be got upon the ground-glass at all. In such a case it is very annoying to find, when all is ready for exposure, that the wall or some other adjacent object prevents the focussing screen from being swung out of the way, or the shutter of the dark slide from being drawn. If the reversing back can be used in any of its four positions, this will not occur. It is most improbable that the position will be such that there is an obstacle on both sides, and so all that has to be done is to turn the reversing back half round. Then the shutter of the dark slide, instead of drawing out from the right, can be drawn out from the left, or from the bottom instead of from the top. It is by no means every camera that will allow of this, and no attempt must be made to force the back into a position which it was not designed to occupy; but when it can be done it is a distinctly good feature of the camera.

The use of a reversing back entails a little attention being given to its position in the camera. If it is not quite "home" in the place made for it, light may leak in and the plate may be fogged. Needless to add, it ought to be a perfect fit, and show no signs of "wobble."

Many of the cheaper forms of camera are not provided with a reversing back at all, but, instead, are fitted with two bushes for tripod screws. If we are using such a camera in the vertical position and wish to get a horizontal picture, we therefore have to unscrew it from its stand, turn it on its side, and screw it on again. All this takes time, and it is accompanied by another drawback. If the camera has only got a rising front and not a cross front when it is in one position, when it is in the other it will only have a cross front and not a rising front. This, as has already been shown in the chat about the camera front, may be found frequently to be an inconvenience. On the other hand, as in such cameras the whole design is oblong instead of square, they are decidedly smaller and more portable than those which are fitted with a reversing back.

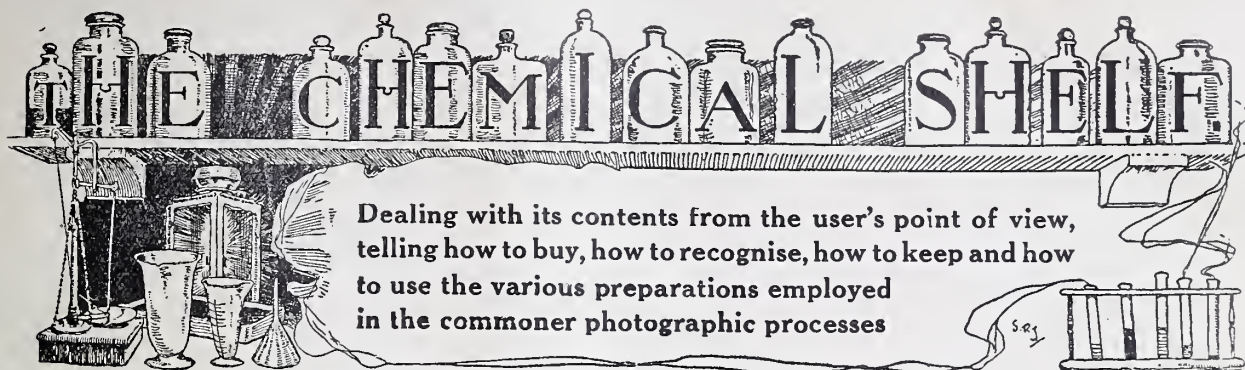
On the whole, it may be said that if the camera is one of the hand or stand kind, and is going to be used in the hand generally, when it is no trouble at all to turn it over, and only very occasionally on a stand, the absence of a reversing back may be counterbalanced by the gain in portability. This is markedly the case with cameras of postcard size, or those of a similar shape, with one dimension much longer than the other. It is plain that, with a plate $5\frac{1}{2} \times 3\frac{1}{2}$ in., the one pattern of camera would have to exceed $5\frac{1}{2} \times 5\frac{1}{2}$ to allow of the back being square and reversing, while the other need only exceed $5\frac{1}{2} \times 3\frac{1}{2}$ —a very different thing. Such cameras, therefore, are seldom fitted with a reversing back.

It is important, in the case of reflector cameras, to be able at times to change the position of the back from vertical to horizontal, or *vice versa*, immediately before exposure, while the plate is in position and the shutter is drawn. If we had to take the back right off to turn it round, the plate, of course, would be fogged. The best reflex instruments, therefore, are fitted with a turntable reversing back. The back is carried on a ring, which turns smoothly in another ring, so that no light can get into the camera while the back is being reversed. This is a very valuable feature of this type of camera.

There is only one other way of surmounting the difficulty of turning the plate, which needs mention here. In the old days, when wet plates were used, the plate was sensitised and put into the dark slide a moment or two before the exposure was made. The dark slide, which usually took one plate only, was therefore made square, so that the plate could be put in it either vertically or horizontally. Some of the very simple forms of camera are still made with dark slides of this kind, and so long as they are used within reach of a dark room or changing bag, they will be found quite satisfactory; but the single square dark slide will soon be extinct, and it is not likely that any of my readers will be purchasing one.

(The next article of this series will deal with the swing back.)

THE SANDRINGHAM EXTRA-RAPID APLANAT LENS. We are asked by Messrs. May Roberts and Co., of 9 and 11, Clerkenwell Road, London, E.C., to state that owing to the increased output of these lenses they have been enabled to reduce the prices as follows: To cover 5 by 4, 18s. 6d.; 7 by 5, 24s.; 9 by 7, 30s.



Dealing with its contents from the user's point of view, telling how to buy, how to recognise, how to keep and how to use the various preparations employed in the commoner photographic processes

MERCURIC CHLORIDE.

Mercuric chloride, chloride of mercury, bichloride of mercury, perchloride of mercury, or corrosive sublimate, is a white, very heavy salt, sometimes sold in large crystals, more often as a fine white powder. It is very poisonous. The ordinary quality sold by chemists will answer every photographic purpose. The salt keeps perfectly either dry or in solution.

The great use of mercuric chloride in photography is for intensification. For this purpose a variety of formulæ containing mercuric chloride have been put forward, but none of them seem to possess any real advantage over the plain solution of the chloride in water, with just a trace of hydrochloric acid added. Ammonium chloride is sometimes suggested as an addition, on the ground that the mercury salt is more soluble in a solution of ammonium chloride than it is in plain water, so that a stronger solution can be used. But nothing is gained by this—not even time.

The simplest way of keeping mercuric chloride is to put the salt as bought into a narrow-mouthed bottle, add ten drops of strong hydrochloric acid, and fill up the bottle with water. It may be shaken occasionally, and as long as some of the salt remains undissolved the solution may be regarded as a saturated one, and will have a strength of approximately six per cent. After intensifying a plate the liquid may be poured back into the bottle, and used over and over again, just as long as it will bleach the plate immersed in it. The acid may be omitted without serious effect; it makes the intensifier work a little cleaner—nothing more.

The proper intensification of a negative depends on its complete fixation, thorough washing, and freedom from fog for its success. Any alkalinity in the water is a drawback, so that if any hydrochloric acid is at hand a few drops may be added to the dish of water in which the negative is put for a minute or two before intensifying. It is then placed in the mercury solution, which must be rocked occasionally until it has bleached right through, and is nearly as white on the glass side as on the front. It will never get quite as white. It has then to be washed; and here, again, it is advantageous to give it three or four baths of dilute hydrochloric acid (half an ounce of strong acid to a pint of water), as this gets rid of the mercury much more effectively than plain water. Then after a rinse in plain water it is blackened right through by one of the solutions given below, well washed and dried.

Another use of mercuric chloride is to impart a warm tone to platinum prints. The merest trace of this salt in the plain solution of potassium oxalate used for developing the prints has a marked effect upon their colour. For this reason, therefore, great care has to be used to prevent any mercury getting to the developer that is to be used for black prints. If brush development is used, the same brushes must not be employed for both; nor should a dish that has held mercury solution be used for developing black tone platinum prints. Even the intensification of a negative with mercury causes it to give prints of a warmer tone.

FORMULÆ.

Bleaching Bath for Mercurial Intensification.

Mercuric chloride	...	...	...	30 grains
Hydrochloric acid	...	...	...	2 drops
Water to	...	...	...	1 ounce

This may be used to bleach negatives, which may then be blackened in any of the following baths:

Liquor ammonia	...	...	...	1 dram
Water	...	...	...	3 ounces

This is the most common method, and gives considerable intensification. The ammonia should not be stronger, or it is very prone to produce pinholes.

Sodium sulphite	...	...	...	30 grains
Water	...	...	...	1 ounce

Sulphite does not give quite so great a degree of intensity as ammonia.

Saturated solution of potassium oxalate	...	...	...	3 ounces
Saturated solution of ferrous sulphate	...	...	...	1 ounce

This is Chapman Jones's method. The ferrous sulphate is added to the oxalate, and not *vice versa*. The action is not so rapid as that of the other blackening agents, and plenty of time should be given. If after intensifying there is any white deposit on the plate, it may be held under the tap and rubbed gently with cotton-wool. The great advantage of this method is that if one intensification is not enough the negative, after washing, may be put back, bleached, and darkened again, and so on until as much vigour as is required is obtained.

Silver nitrate	...	...	...	50 grains
Potassium cyanide (about)	...	...	...	50 "
Water	...	...	...	5 ounces

The silver nitrate is first dissolved in the water, and then the cyanide (very poisonous) is added a little at a time, until the precipitate which forms on the first addition of the cyanide has almost disappeared. The quantity of cyanide should be estimated in this way. The solution should be slightly discoloured. This intensifier, known as Monckhoven's, gives great density at a single application, but if the bleached negative is left too long in the blackening solution some of the density first acquired will again be lost.

Schlippe's salt	...	...	...	30 grains
Water	...	...	...	3 ounces
Liquor ammonia .880°	...	...	...	10 minims

This gives a great degree of intensification.

Developer for Sepia Tones on Black Platinum Paper.

Neutral potassium oxalate	...	...	...	1 ounce
Water	...	...	...	4 ounces
Saturated solution of mercuric chloride	...	...	...	1 dram

The developer should be used hot (150° Fahr.) on the cold bath paper, and gives an agreeable sepia. If the whites are at all discoloured, the proportion of mercury is too great. The acid baths should be diluted to half strength for sepia prints obtained in this way.

A Photographic Rendezvous.

VISITORS to London who are photographers should certainly call at the magnificent establishment which Messrs. Griffin have put up in Kingsway, where they have installed what they call a photographic rendezvous. The large and tastefully decorated exhibition rooms contain collections of modern work, which are frequently changed and are always very interesting. There is a free reference library of photographic books, and three dark rooms are placed, free of charge, at the service of callers.

A feature of the place is the series of practical demonstrations. These are given every weekday afternoon, except Saturday, at 3.30 p.m. On Monday the subject is "Veloxy Printing by Gaslight, and Modern Toning Methods"; Tuesday, "The Development of Watalu Plates"; Wednesday, "Goldona"; Thursday, "Oil Printing"; and Friday, "The Art of Mounting Photographs." These lectures are quite free.

A Home-made Backing for Orthochromatic Plates.

MOST backings on the market are of a red or of a brown colour. This colour, while it is doubtless all that is required for ordinary or non-orthochromatic plates, is not suitable for those that

are used for colour-
rise, since the plate is
exposed to red light, and
red light is not absorbed
by the backing, at least
not to the extent that
other light is. It has
long been realised that
in making the backing
for orthochromatic plates should
be black.

The commercial back-
ings are generally be-
lieved by the public
to be of any black or
dark pigment, which may
be mixed in with the
backing just before it is
applied to the plate. In
very little is needed, just
enough to make the mix-
ture a brownish black to
the eye, and this is all
the measurement that is
necessary. It will be
found that the addition
has the effect of making
the backing dry more
quickly.

Of the home-made back-
ings, the most popular
is that which is made to
the Talcott formula, and
given a slight modifica-
tion this can be made
available for use with
orthochromatic plates. An
ounce of borax should be soaked for some days in an ounce
of a strong solution of gum arabic. When it is quite liquid, a
quarter of an ounce of burnt sienna and a dram of ivory
black should be well incorporated with the mixture. If it is

too thick for use in this condition, it may be thinned by
the addition of a little water; but water should only be added
cautiously, as it interferes with the rapid drying of the
backing.



"Willow Tree."

Awarded a Prize in the "Focus" Landscape Competition.

By F. WEITAKER.

The backing may be rubbed on the glass side of the plate
with a dabber made of rag, and the thinnest possible coat-
ing will be found sufficient to prevent any trace of halation
from showing.

About Cleansing Liquids.

Every photographic utensil is thoroughly
cleaned with a brush or cloth and plenty of
water, while it is still wet with whatever has
soiled it, there will be no necessity at all for
the use of any special cleansing solution. No
photographic liquids fail to yield to a vigorous
application of water and elbow grease; but
when, once they have been allowed to dry on the dishes or
measures in which they were used, the case is different, and
some powerful chemical solvent is often necessary before they
can once more be regarded as clean.

One of the best of these, as it is one of the simplest, is
fuming hydrochloric acid. The "spirit of salts" of the oil

shops does quite well. A stoppered bottle holding about a
pint should be labelled "Cleaning Acid," as it should hardly
be necessary to remark, the hydrochloric used for this pur-
pose must not be employed for any other. Hydrochloric acid
is a very effective remover of the stains left by stale
developers. The measure or dish to be cleaned should have
some of the acid poured into it, and then be gently rocked,
so that the liquid comes into contact with every part of its
interior. In doing this there should be no necessity what-
ever for wetting the fingers with the acid, and it should be
done where there is a free current of air to carry away the
very corrosive and unpleasant fumes. After a minute or two,
the acid may be poured back into the bottle and put away

for another time. Most of the stains will have been removed by the mere wetting with it, and any that are left will most likely yield to a gentle rubbing.

Another liquid which has a powerful detergent effect is made by taking two ounces of potassium bichromate and dissolving it in a pint of hot water. When cold, an ounce of strong sulphuric acid should be added slowly, with stirring. The acid must be added to the solution and not *vice versa*; this must be done slowly, as its action is a very violent one. The liquid will get hot, and must be put aside to cool. It can be used exactly in the same way as the hydrochloric acid just described, but stains which the latter will not touch often yield at once to the sulphuric-bichromate treatment. It is very effective for cleaning badly stained bottles; when everything else has failed, the bottle may be filled with it and put away for a few days, when it will probably need nothing more than a good rinsing out with water. This mixture may also be used to clean old negatives, spoilt plates, etc., of which the glass is wanted. It is merely poured out into a dish; the plates, which should first have been soaked in cold water for half an hour to prevent them from sticking together, are laid in it and left for twenty-four hours; after which they may easily be scrubbed with a stiff brush and rinsed, until quite clean.

Developer stains can also be removed with a little ferricyanide and hypo reducer, which is also a most effective remover of the black silver stains, which follow any attempt

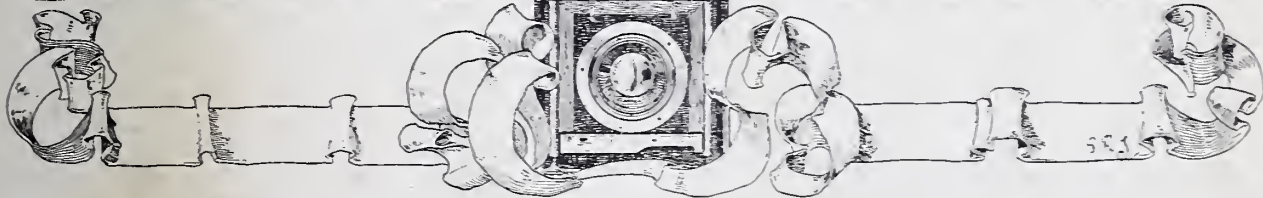
at silver intensification. But a better and certainly a cheaper liquid for this purpose is the C Autochrome solution, which is made by dissolving fifteen grains of potassium permanganate in a pint of cold water. When all is dissolved, a dram of sulphuric acid may be added, with the precautions described above.

Stains which will not yield to anything else can often be removed by means of strong nitric acid, but it can only be exceptionally that this should be necessary. As it is more costly than hydrochloric acid, it should not be used without good cause; but if it is wanted, it too may be put back into a stoppered bottle, and used over and over again until it ceases to act.

All these liquids, it should be borne in mind, are highly corrosive. In fact, it is because they are, and because they attack and corrode the stains, that they are of use. The fingers must not be put in the strong acids at all, and as little as possible in the others; and on no account should a drop be allowed to get on one's clothes. While they attack and remove stains, they are themselves to be regarded as impurities, and the vessels which have been treated with them must be carefully washed free from them afterwards, before they are used for any other purpose.

This note, however, cannot finish better than as it began, by repeating that these solutions should not be necessary if everything is washed up and put away as soon as it is done with.

PRACTICAL PARAGRAPHS



HATS AND FINDERS.—A CAUTION.

Few people would think that the photographer's headgear might make or mar the picture he was taking, but it is a possibility to be taken into consideration by all users of hand cameras with the view finder in front of the lens, as the development of some thirty or forty plates has just proved to my sorrow. Plate after plate came out with one corner obscured, but the apparatus, which was a first-class one, had no defect to which this could be traced. After some consideration, however, I noticed that the plates which had the trouble were all exposed when the camera was held in the hand, while those in which it was on a stand were free from it. A few experiments were tried, and I found it quite easy to repeat the trouble merely by looking well over the finder so that my hat brim just partly shielded the lens, the corner so obscured in every case corresponding with the part that was defective in the negatives. Perhaps the fashion of wearing the hat on the back of the head may have originated in this, and I am wishing I had been more fashionable.—NURSE F. C. DAVIS.

Writing in the "Camera," Mr. A. J. Jarman gives the following particulars of his method of preparing a simple and effective flashlight, where the light is not necessarily an instantaneous one. In the first place, several 10×8 glass plates should be thoroughly cleaned, dusted with French chalk, and polished. The following mixture is then prepared:

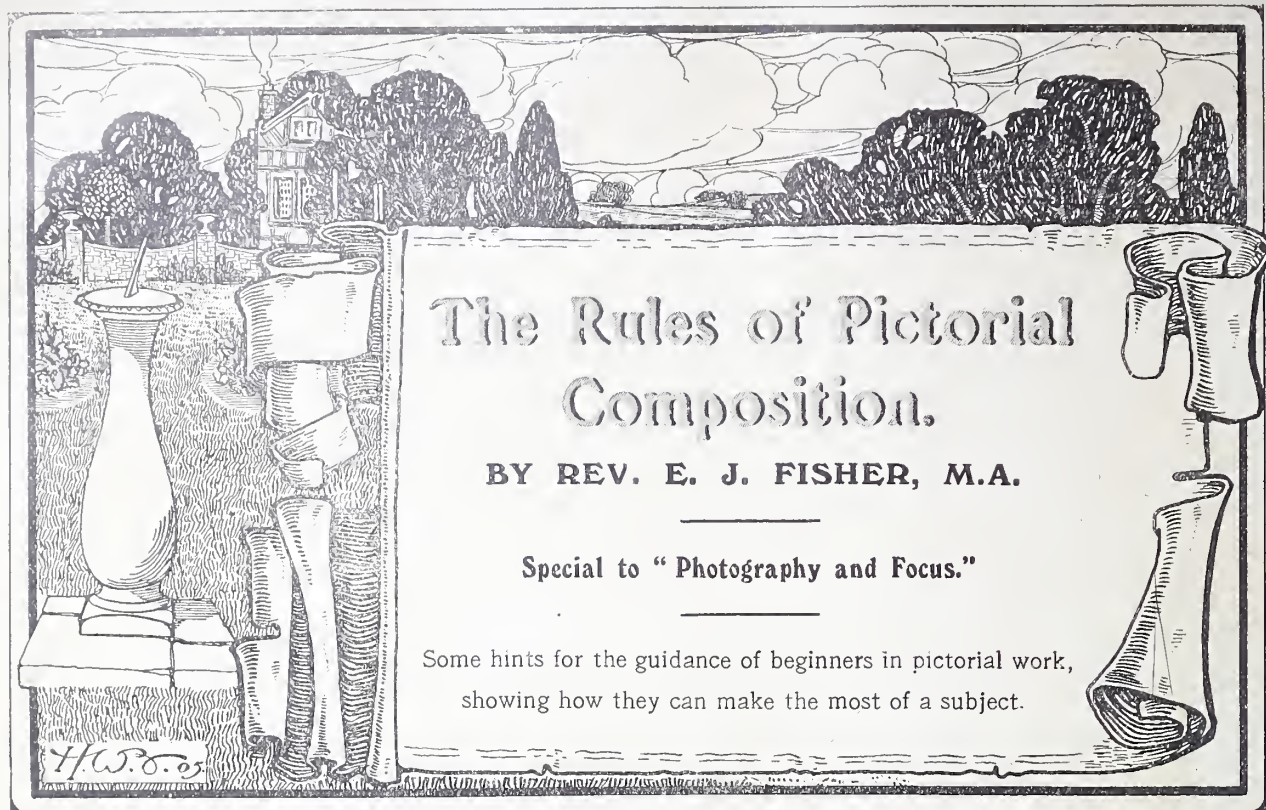
Flexible collodion	...	...	...	5 ounces
Powdered magnesium	...	...	...	2 "
Potassium chlorate (twenty grains				
powdered and dissolved in an ounce of				
alcohol)				

The magnesium is added to the collodion, and then the chlorate solution. The mixture is put into a wide mouth bottle, corked, and well shaken. A pool of this liquid is poured upon the centre of one of the 10×8 plates, allowed to flow all over, so as to extend to each corner, and the plate

is then laid on a slab of slate or marble that has previously been levelled, so that its coating may become well set. Several plates may be coated in this way, and when their coatings are set may be placed on edge in an ordinary plate rack to dry. All these operations should be carried out by daylight, and at no time must the work be done near a naked flame, as the vapour of the collodion is very inflammable. When the coating is quite dry, a cut is made all round the glass with a sharp knife one eighth of an inch from each edge; the film is lifted by one corner and will come clean away from the glass. Each sheet can be cut in half and stored away between sheets of thin paper for use. All that is then necessary is to attach two ends of the sheet to the centre of a thick piece of cardboard, and to apply a match to one corner of the sheet.

* * *
A paint which will dry a dead black, and is, therefore, useful for blacking any bright parts in cameras, dark slides, etc., may be made by taking about a teaspoonful of lamp black or vegetable black, adding to it three or four drops of gold size, not more, and working it up with a thin knife on a piece of glass until it is a perfectly smooth stiff paste. This paste may then be transferred to a bottle, two drams of turpentine added, the bottle corked, and very thoroughly shaken. The paint dries quickly, without any gloss.

* * *
We are often told that magnesium ribbon should be scraped with a knife or rubbed with sand paper before being burned, in order to remove the film of oxide on its surface, which prevents it from burning regularly. But it is even less trouble to prevent that film from forming. If the ribbon is bought in a tight coil, in the way it is usually sold, it will generally be found to be perfectly bright on the inside of the coil: and if it is kept, when not in use, wrapped up in a piece of waxed paper, it will be found to keep bright. At least that is my experience. W.J.



WHILE the novelty of using a camera is still strong upon the photographer, the subject of the composition or arrangement of his pictures is one which troubles him very little. He makes up his mind what it is he wishes to photograph, gets it, fair and square, on the ground-glass, and strives to get a print which shall be bright and sharp, and there his care ceases. But he will soon find that photographs of this sort fail to satisfy him; at least he will find so if he is ever going to do anything worth doing with his camera. He will realise that whereas he gave all his attention to the subject of his photograph, to the exclusion of other things that may have appeared near it, his camera by no means did the same. It has drawn with perfect impartiality the things which he wanted and those which he did not want. So much so, that if he shows his prints to friends

they may not even guess what it was of all that appears in them which induced him to take the photograph at all.

Such a result should turn the mind of the photographer to the subject of pictorial composition. It is by the composition of the picture that one part is emphasised and another subdued; that we indicate that it has a subject, and is not a mere chart of things that happened to be in front of the lens. It has been said



Italia.

By H. G. Drake-Brockman.

that good composition must be "felt," and that it cannot be a mere matter of rules, such as can be laid down for toning P.O.P. or for developing. All the same, there are certain rules which have been drawn from the study of pictures, which, if they do not make our composition perfect, will at least help us to avoid very serious mistakes.

One of these has reference to the centre of the picture. This is the weakest place in the composition, and for that reason the centre of interest should never be at the mathematical centre of the print. Nor should any strongly marked line ever run through the centre, or it will appear to divide the composition in two. The horizon or sky line, when this is a line, should not come halfway up the picture; but when it is very much broken, or when the tones of sky and distance are so similar that all feeling of an actual dividing line is lost, the rule is not so imperative.

The principal lines of a picture play a very large part in its effect, but their disposition and arrangement must be left almost entirely to the good taste of the photographer. It may be pointed out, however, that no hard unbroken line should ever cross from one edge of the print to another: that strongly marked straight lines will often be found detrimental: and that the shape of any very decided lines in the composition is a matter for very careful observation and thought. Because a certain thing is itself beautiful is no reason whatever for assuming that a picture of it will be beautiful, too. It may or may not be; and unsuitable lighting or unsuitable surroundings may make the most faithful reproduction of it ugly and unpleasant.

Another rule which may be laid down pretty definitely is that the distribution of the light and shade in a picture must not be lop-sided. If most of the darker tones come on one side of it, there must be at least a small patch of some strong shadow on the other to balance them. The same principle holds good with the lights. The hardest part of the landscape photographer's task, very often, is to avoid breaking this rule as far as the top and bottom of his pictures are concerned. It is so terribly easy to get prints with all the lighter tones in the sky, which forms the top part of the picture, and all the darker tones in the landscape which forms the lower half. Unless the sky can be broken by some foreground tree or other object, these pictures are almost always unsatisfactory.



The Path by the Trees.

By Rev. C. O. Stewart.

Awarded the Second Prize in the "Focus" Landscape Competition.

An unpleasant effect is generally created when heavy objects appear in a picture without their supports being apparent. An overhanging branch and leaves is a very common case in point; and another can often be found in a collection of architectural photographs, where some arch is shown, springing from a support at one side, but descending on the other, and cut off before it reaches its support. So long as the unsupported line of the arch ascends out of the picture all will be well, but when it descends there is always a feeling of instability about the composition. The rule

*Sleepy Chester.**By J. H. Hammond.*

is all the more important the more prominent and strongly marked the line to which it refers. If the arch is a mere accessory to the real subject, and is in shadow or unobtrusive, it does not matter so much; but it is better, all the same, to observe the rule.

All the important lines in a picture should not run in the same direction, but some must be balanced by opposing lines. Otherwise the picture will have an unfinished look, as if some important part of the composition had been cut off. Examples of this fault can often be seen in pictures taken on a coast or shore. The lines of the land slope round generally towards the sea, and unless there is some boat or other object to provide balancing lines, the mere blank expanse of the water, which is all there is on the other side, with nothing but a few horizontal lines, is unable to support them. The effect is often made all the worse from the concentration of interest on the land side.

Although not exactly a rule, it is well to avoid any very light tones right at the extreme edge of the print, as they have a disturbing effect, leading the eye out of rather than into the picture. Such a defect can often be remedied by sunning down the edges, although the effect is always a much more natural one when it is secured by arranging the subject to start with.

Such are a few of the rules which the successful picture will observe. There is hardly one of them which has not been broken by a great artist at some time or another; but that is no reason why the photographer should ignore them. He is not a great artist, presumably; and he is working in so limiting a medium that, even if he were, he cannot afford to violate them.

A word as to the time of their observance. They apply, of course, only to the final finished print, and, except for convenience sake, the negative need not observe them at all. It is a big "except," however, as everyone who has attempted any extensive work on a negative will be ready to admit.

The lines of the composition, with few exceptions, are settled absolutely when the picture is arranged on the ground-glass. The tones can often be modified afterwards; though the more all the work of composition is done on the focussing screen, the less chance there is for incongruities and blunders. The actual proportions of the picture are best settled after the negative has been obtained.

When we have finally decided that we have found the best view point for our picture, the chief thing to do is to make sure that everything that is wanted in the composition is well on the plate.

It is a very provoking thing to find that the boundaries of the finished picture are determined, not by the demands of the subject, but by the edges of the negative.

There is a strong temptation—I have often felt it myself—to get nearer to our subject than the first chosen position, in order to get it larger on the plate. It is a very natural thing to do; yet it may mean the spoiling of the picture. I have not heard it put forward as a rule, but it would certainly not be a bad one to add to the others, wording it something in this way: "Never take the camera nearer to the subject, unless for some better reason than the mere getting of it bigger on the plate." In these days, when enlarging methods have reached such a pitch of perfection, it is comparatively unimportant whether the real picture occupies a couple of square inches in the middle of a half-plate or whether it covers the entire plate.

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Tudor Street, on Wednesdays, between the hours
of 9.30 and 11.30 a.m., but can only be seen at
other times by appointment.



AN INGENTOUS DEFENCE was raised
by a photographer at Crewe charged
with a breach of the Lord's Day
Observance Act by taking a portrait of
a policeman. The photographer said
he had applied for a license to photo-
graph on Sundays, and had been sup-
plied with a refreshment house license.
The Bench decided that the photo-
graphy of a policeman could not be con-
sidered as refreshment within the mean-
ing of the Act.

THE PRISM. Messrs. A. E. Staley
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Circus, London, E.C., write us that
they will be pleased to forward a copy
of the current issue of "The Prism"
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penny stamp for postage. We are
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Lomb have altered both the style and
the contents of "The Prism," and
hope that they will revert to the old
format, which made the little publica-
tion unique.

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× × × ×
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representative of "The Bystander" at
the Photographic Convention at Ghent
Town Hall, "when the champagne
came round some of us—belonging to
the male sex, of course—were so very
thirsty that we—that is to say, they—
grabbed a tray of filled glasses intended
for the ladies. Our hosts were indig-
nant, and one of them wanted to know
if 'that was English manners.'"

Dark Room Dont's.

Don't put dishes away dirty.

* * *
Don't leave a washing tank right
way up when it is not in use. Drain-
ings of water will accumulate and cause
rust.

* * *
Don't dabble the fingers in the solu-
tions more than is absolutely necessary.
Use a plate lifter.

* * *
Don't keep hypo solution in a dish
from day to day till it is the colour of
porter, and not half so good.

* * *
Don't put negatives up to dry with-
out giving them a final rub under the
tap with cotton wool.

* * *
Don't believe the darkroom light is
so safe that there is no need to cover
the dish during development.

* * *
Don't use a darkroom light of which
you cannot believe this.

* * *
Don't take the negative out of the
hypo as soon as it seems to be fixed.
It isn't fixed; but it will be if given as
long again.

* * *
Don't put solutions in unlabelled
bottles, relying on memory to tell you
their contents.

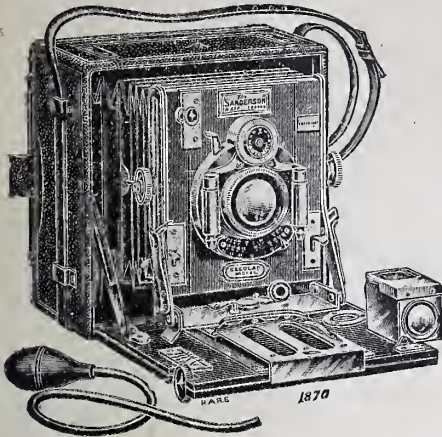
* * *
Don't put negatives or slides straight
into hypo after development with
hydrokinone. Give them a minute's
washing under the tap, or there will
be a risk of staining them yellow.

* * *
Don't curtail the time for washing
plates or prints. If they are worth
washing at all they are worth washing
properly.

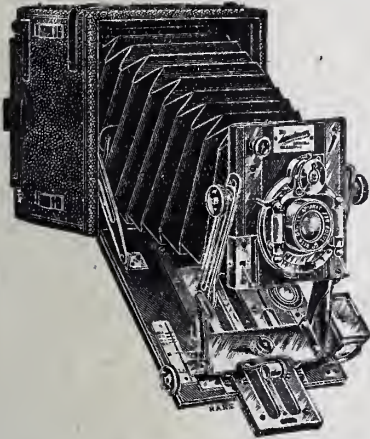
* * *
Don't try and develop bromide
prints in the dim red light which is a
necessity for ultra-rapid orthochro-
matic plates. It is impossible to get
prints of the right depth and vigour
if you cannot comfortably see what you
are doing.

* * *
Don't let a dish that is in use stand
in a lot of wet. Sooner or later some
of it will find its way inside, when if
it is anything but plain water there
may be trouble.

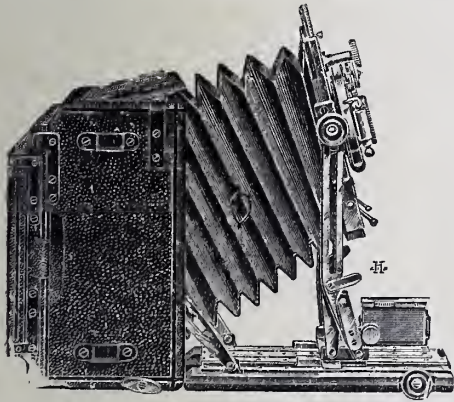
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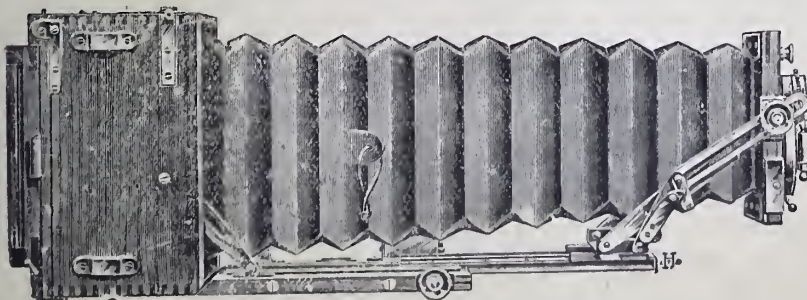
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question on *one* subject is allowed in each letter. (4) Prints may be sent for criticism, but a separate coupon must be sent with each print, and a stamped addressed envelope (not loose stamps) for their return. Queries are dealt with in strict rotation in the order received. Only "Urgent Apparatus" queries will be dealt with by post, for which purpose a stamped envelope must be enclosed.

A. C. BAXTER (Bartley Green).—See reply to F. E. Murrell.
G.W.—The series is discontinued for the present but may be resumed.

A. STAEGER (Luton).—We cannot reproduce and criticise photographs as suggested.

WORKER (London).—They are produced by three-colour half-tone photo-engraving.

BUXTON (Buxton).—We regret to say we have no information likely to be of service.

D.R.C.P. (Clapham Park).—Properly used there should be no fear of the heat hurting the camera.

A.W.E. (Hackney).—The negative from which this was printed needed development for about half as long again.

NOVICE (Catford).—Copying can be done with the camera, but a magnifier will be wanted to copy anything on a fairly large scale.

C. J. KING (Leicester).—We are informed that permits can be obtained on application at the Wood Lane entrance, price 1s. for the day.

LANTERN (Repton).—A reader informs us that printing-out lantern plates are sold by the Halifax Photographic Co., Halifax, Yorks.

FOREIGNER (Coventry).—None are specially made for hot climates, and the ordinary do not keep very well, but still are used extensively.

J. GRONOW (Cardiff); F. STAPLEY (Eastcheap).—Coupon to hand, but the query was not kept. Please repeat the enquiry, sending coupon *with it*.

S. R. NORMAN (Deal).—Application should be made to Marshall Brookes and Chalkley, Harp Alley, E.C. We do not know whether they can supply or not.

F. H. NEEDHAM (Goole).—We do not know a better method than that with paraffin wax, either with or without American cloth, as described last week in an editorial.

J. A. COULTAS (Bradford).—It would certainly require two dozen or more, but no definite data as to number or position have been published, as far as we are aware.

SIRRAH (Tooting).—We do not know any remedy for the defect; and we should not care to put in a window as you suggest. Surely the changing arrangement is out of order; in which case it would be better to try and find out where it is wrong and remedy it.

E. C. WEBLEY (Yately).—We do not think it likely that you will prefer the portrait lens, certainly not on the grounds you name, as practically its only advantage is its large aperture and consequent rapidity. We should prefer to use the back half of the rectilinear.

ALPHA (Tonbridge).—We are glad our other reply was of service. Caramel should be in hard dry lumps very brittle. Sienna in lumps or in a fine powder. We know of no satisfactory formula that does not employ them. Probably one of the big London houses would supply you.

LEWARD (Failsworth).—Excessive overexposure will produce a positive instead of a negative, but in this case there seems to be no doubt that the result is due either to a developer much too strong or perhaps containing hypo, or else to the plate being badly light fogged during development.

H. W. VAUGHAN (Coalville).—The exposure would be somewhere in the neighbourhood of two seconds at six feet, but a single experiment should give it to you. We are afraid you do not grasp all the difficulties of speed measurement; the problem is, unfortunately, by no means so simple as your letter would suggest.

W. S. PAKENHAM-WALSH (Foochow).—We cannot see how such staining as you describe is possible; the stains must be due to something else and not to the backing, and as we do not know what has caused them we cannot say how they can be removed. The persulphate reducer, as used for negatives, can be used; but over-developed bromide prints seldom repay any attempt to reduce them.

J.G. (Accrington).—We should scale it for 6, 12, 18, 24, and 36 feet and infinity, by actual trial, focussing an object as sharply as possible in the centre of the focussing screen to find out the position of each mark. A hundred yards may be taken as a guide for the "infinity" mark. This is not using it as "a fixed focus camera," however, a thing that is not practicable with a half-plate camera.

T. PAGE (Pickering).—Raines and Co., St. Mary's Road, Ealing.

J. HAYMAN (Belmore).—We have entered your card in the Beginners' Competition.

B. SARKAR (Punjab).—As soon as we have further information as to the multi-speed shutter we shall give it.

A. BARTHOLOMEW (Lewisham).—Mr. Albert Smith's address is The Laboratory, Roman Crescent, Southwick, Brighton.

E. T. HUMPHRIES (Ballymena).—Your enquiry is rather vague; but a Sanderson by Houghton's, Ltd., is probably what you require.

WORRIED (Atherstone).—Either the chemicals are at fault, in spite of your assurance to the contrary, or the preliminary washing has not been anything like sufficient.

H. T. CRAUFIELD (Chelmsford).—Insects are probably at the bottom of it. Cockroaches, perhaps, as they are very partial to gelatine. We have seen nothing like it before.

E. BOND (Bristol).—No. 4 is not f/4 but f/8, and the others are f/11, f/16, f/22, and f/32, in that order. It ought to fetch about half list price, but they are not easy things to sell.

F. E. MURRELL (S. Tottenham).—No camera can be used in the Franco-British Exhibition without a permit, obtainable, price 1s. per day, on application at the Wood Lane entrance.

LLOYD (Belfast).—An iris diaphragm does not need to be oiled. Your best plan would be to clean all the oil off it, and if it is still as stiff as you say to send it back to the makers.

DUMMY (Stockport).—When a negative looks like a positive, on the glass side, it is usually overexposed. The lens and plates are all right, and there is nothing wrong with the developer.

D.O.R. (Birkenhead).—It is not at all usual to attempt to intensify a toned P.O.P. print, and we do not know of any formula which could be relied upon to give a satisfactory result.

G. P. BAXTER (Hull).—No doubt it has occurred to many readers as it has to ourselves. If at any time we see our way to alter it we shall, of course, do so. It is as it is from necessity, not from choice.

FLASHLIGHT (Malvern).—It is quite safe to dry negatives with methylated spirit if properly carried out, but the results are never quite so clean looking as when the plates are allowed to dry spontaneously.

S. COOPER (Loddon).—The defect is caused by dust on the surface of the plate at the moment of exposure. It prevents the light from getting to the plate underneath it, and so those parts develop up as clear spots.

S.W.B. (Cork).—Some do and some do not; it is better when they are to go by post, but if kept in a portfolio the cardboard is hardly needed, and is not usually employed. We are afraid your proposition is not workable.

TODDLES (Plymouth).—We have experienced the same difficulty. The only way out is to use the ordinary developer for prints that are to be toned, and to get rid of friction marks before toning by a momentary treatment with ferricyanide and hypo.

CARMELITE (Carmelite Street).—If you read the article again carefully you will see that discrepancies are explained at the end. The H. and D. numbers of different makers marked on plate boxes are not comparable, being obtained by different methods.

W. A. MACKENZIE (Dunblane).—The 180 mm. means that the focus is a little over 7 inches. We expect that 1 stands for f/7.7, and that the other graduations are relative exposures, in which case you will not be far wrong if you treat 2, 4, 8, 16, 32, and 64 as f/11, f/16, f/22, f/32, f/45, and f/64 respectively. We have no notion of its value.

R. T. DIXON (Dover).—We believe it to be caused by reflections from the sides of the camera, or from some part inside that is not a dead black. This should be looked for and blacked over. If not, then the lens probably requires more of a hood than it has got, and one should be fitted. It can be done with a little piece of card and black velvet.

C. F. MONEY (Horsham).—Either flashlight or magnesium ribbon must be used; we should recommend the latter. The quantity would have to be determined by experiment, as it would depend on the size of the caves, the colour of their walls, and the focus of the lens. The shorter the lens, the nearer the camera will be to the walls, and presuming the light is behind the camera, the nearer it will be also and therefore the more powerful the illumination.

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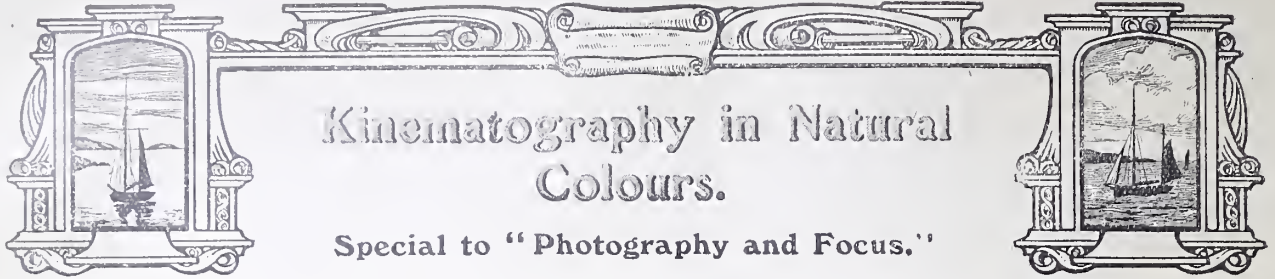
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HE is a daring man who would venture to set a limit to what may be accomplished by human ingenuity and perseverance, and say such and such a thing is impossible of attainment. Mankind resembles a mountaineer who vows he will rest content if he can but reach the summit above him; and having scaled it he sees new peaks beyond, and rests not till he has conquered those also, and from thence looks eagerly for still further heights to climb.

If we trace the history of the progress of the art of photography we find this strongly exemplified. As each forward step was made there was never an idea that it marked the limit. The cry was always, "Ah, if we could only do so and so!" And to-morrow it was done, and a new ideal was set up. A little while, and that too was achieved, and a more distant goal was named. And so it comes to pass that already we have arrived at "animated pictures" in colour. No one who has seen the beautiful effect of a camera obscura can have failed to have been fascinated by it, and to have regretted that it was all so transient, that it left no more permanent record than does a cloud shadow flying over wide meadows and rolling hills. But now, it appears, this effect of colour and movement can be permanently recorded, and reproduced at will.

The problem of attaining this bristles with difficulties. No doubt many shrewd brains and skilful hands have long been at work to "find a way." Let us see just where matters stand to-day.

The other afternoon the Lord Mayor of London, the Lady Mayoress, and a small private party assembled at Urbanora House, in Wardour Street, the premises of the Charles Urban Co., Ltd. The chief item of an interesting programme was (to use the words of the announcement) "the reproduction of a few examples (never publicly exhibited) showing the results of experimental research conducted during the past three years by Mr. G. Albert Smith, F.R.A.S., with explanatory remarks by the inventor." Unfortunately for our feelings of pardonable curiosity, Mr. Smith gave not the slightest hint as to the method by which he had secured his results. We might hazard a guess at the means employed, and some justification for our surmise might be found in the fact that at times the pictures showed the same effect as we see in a colour print when the blocks have not been in accurate register. However, the man in the street will gladly accept his kinematograph pictures in colour without troubling himself unduly as to how they have been produced. He will also accept philosophically the shortcomings and defects, just as he endured the manifold imperfections of early kinematograph records, in the confident expectation that improvements will be both great and rapid.

In the case of some of his films Mr. Smith had conceived a very happy idea. Where the subjects admitted of being photographed at rest, with a fairly long exposure, he showed first of all a rendering on a Lumiere Autochrome plate. In this way a very good idea was obtained of the exact colours of the objects and characters, and a standard of comparison was given to judge of the fidelity of the colour-rendering in the subsequent kinematograph film. It says much for the success of Mr. Smith's results that they came out of this severe ordeal with, figuratively, flying colours.

The ordinary photographer knows only too well the saddening result of attempting to render the scarlet tunic of the British soldier. Mr. Smith had been asked whether he could tackle such an object. In reply to the challenge he produced a film of some military bandmen leaving their stand on a seaside pier. He carefully planned out for them a route to follow so that they should fit well into his picture, but force of habit proving too strong in some cases they made direct for the refreshment bar, and by so doing passed too close to the camera. But the colour of their coats was unmistakably

correct. More significant still was the faithful rendering of complexions of passers-by, and of the less pronounced colours of the scene. It is in quiet and delicate colourings that shortcomings in colour photography are most apparent.

Some continental street scenes were also most successful. People and vehicles passed to and fro, flags flapped in the breeze, a motor whizzed past with its attendant dust-cloud, and throughout all the usual interest of a busy moving scene the colours were strikingly and truly maintained. As has been said already, there were imperfections. At times something was obviously wrong, and coloured edgings appeared. But on the whole the effect was excellent.

In the case of a dancing girl in Highland costume, not only was the colouring of the plaids most effective, but the tones of the flesh and the colour of the eyes were truthfully given even during the most rapid movements. So far, our experience of photographic rendering of colour has been that comparatively long exposures are imperative, but the films shown certainly indicated that this drawback has been successfully overcome. A pretty accurate idea of the general effect secured may be obtained by imagining a combination of the movement-rendering of the ordinary kinematograph film with the colour-rendering of the Autochrome plate. All who keep in touch with the progress of photography will admit that this is saying a great deal.

Attempts to colour kinematograph films by hand may be ruled out of account as impracticable. The thing has been done, certainly, but it may be dismissed as of little practical utility. For example, one of Mr. Smith's subjects had as part of its background a red brick wall. Each brick was distinct, and surrounded by its edging of white mortar. How could this have been accurately done by hand, not on only one piece of film the size of a postage stamp, but on thousands? And if there is such difficulty in the hand-colouring of a brick wall, how much more would there be in the thousand times repeated tinting of a single face. Mr. Smith's process, whatever it may be, mechanically overcomes all these difficulties, and he is to be congratulated on the outcome of his patient experiments and research.

It must be remembered, of course, that the exhibition of these films was given under ideal conditions. The arrangement and equipment of the Urbanora demonstration room are as near the ideal as up-to-date resources can make them. It may therefore be some time before satisfactory displays of colour films are possible under ordinary theatre conditions. But sooner or later there is every reason to anticipate that the ordinary black and white kinematograph rendering will be a thing of the past, and we shall have the charm of realistic colour added to the interest of movement. 'Tis a consummation devoutly to be wished.

The Eye.

AN interesting little book, entitled "The Eye: Its Elementary Anatomy, Physiology, and Optical Constants," by Mr. Lionel Lawrence, has just been published by The Orthos Press, of 21, John Street, Bedford Row, London, W.C. It deals with its subject in four chapters; the anatomy of the eye, vision, colour vision and blindness, and dioptrics and constants of the eye, being the subject matter of the four. The close analogy in many respects between the eye and the camera enables a photographer to follow readily the explanation of the functions of the different parts of the organ, and the passages which deal with the optical perfections and imperfections of the eye will specially appeal to him. It ought to prove a popular little book, as it tells just what every intelligent person would like to know about the eyes, steering well between too superficial treatment on the one hand and the tendency to make a medical treatise of it on the other.

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"The time has come, the Walrus said, to talk of many things."

It is pleasing to find that what one writes is not altogether without effect, and that my words on this page are not entirely lost and forgotten is shown by two communications which reached me this morning. The first of these is a printed notice from the Cripplegate Photographic Society, which henceforth stands higher than ever in my esteem and regard. The notice, in giving particulars of an outing, includes these words: "Members are asked to come and bring their friends. They are also invited to bring some nice girls, preferably with sun bonnets, for studies."

* * *

That is the sort of thing I have been advocating for years. Fewer cameras and more girls. Nice girls. Preferably with sun bonnets. For studies. I rather deprecate the limitations imposed by that expression, "for studies," although I take it that the expression would be interpreted in a very wide and liberal sense. The study of a nice girl, with or without a sun bonnet, is a branch of photography that appeals to me most powerfully, and I should certainly attend that outing were I not already otherwise engaged. The only difficulty I can foresee is the probability that every man Jack of the members will neglect to take his own quota of nice girls, but will go with the intention of enjoying the feminine dainties provided by the others. Consequently, there will not be any nice girls, and the outing will be a frigid failure. There is also an element of danger in an unrestricted invitation to members to bring their friends. Some friends of photographers can hardly be described as acquisitions from the point of view either of utility or ornament. Still, I welcome this Cripplegate notice as a great step in the right direction, and as a palpable outcome of much sound advice I have tendered on this page. There are many happy couples at the present moment who bless the day when they first adopted my suggestion that it is an excellent plan to organise a photographic outing for two only; and, it must be admitted, there are other couples who followed the same course, and who, as a consequence, would willingly shed my gore. That is their look-out. They organised wrongly. They chose the wrong companion without consulting me in the matter at all.

* * *

Now I come to the second communication, which came by the morning post. This is no other than a picture postcard. I do not mean to convey the idea that the postcard bore a picture; I have too much respect for the word picture. It bore instead a bromide print made from part of a larger negative, and presented to the enraptured eye one large comic policeman with whiskers, one small ditto without face-fungus, and portions of six other miscellaneous persons of doubtful whiskerosity, inasmuch as their faces are not included. This postcard is entered for a competition for photographic renderings of policemen, and the last reference I made to this competition was in June, 1906. So you see that after a lapse of some five-and-twenty months my words have spurred a reader into activity. I wonder how many of my present readers remember that policeman competition? As a matter of fact, it never came off. Although I solemnly declared that it was a *bonâ-fide* competition, and although the editor backed me up with his sworn affidavit, no one would take it seriously. They persisted in thinking it was all a joke.

* * *

So it was.

* * *

Nothing much seems to have been said of the effect of the proposed Daylight Saving Bill on photographers, yet surely it is of considerable importance to them as a class. I don't know whether I quite grasp the exact idea of the projected change. I doubt whether anyone does. The general intention seems to be to take fuller advantage of such daylight as we get, and also to take advantage of poor human beings.

It implies deliberate self-deception. On a given night all clocks, watches, and sundials are surreptitiously shoved on a couple of hours. You wind up your watch at ten o'clock, and, lo! in a moment it is midnight; and unless the poor ghost in the haunted grange hustles along, he will find himself two hours late for his nightly prow. You alter the alarm clock to tally with your watch, and get up as usual when the beastly clock explodes at eight the next morning. Of course, it is really only six o'clock. But not a word. You have your five o'clock tea. It is really three o'clock. But not a word again. You simply keep on "kidding" yourself.

* * *

What I want to know is, where do photographers come in? Some have regulated their exposures for years by means of tables showing the variation for different hours of the day. A chap goes out with his camera to do some early morning work. He looks up the exposure for 6 a.m., and follows the instructions. He is sold. It is really 4 a.m., and the sun is not yet up. You can't kid the sun with a lying alarm clock. The sun is not going to alter his habits at his time of life.

* * *

Another poor amateur goes out to whack off a few sunset skies for cloud negatives. His tables tell him that the sun sets at 9 p.m., and he gets on the spot in good time. Very good time indeed. Such good time that he has to stand around like an idiot for two mortal hours. By the time he has made his exposures and walked home, he finds it is midnight, and everyone is fast asleep. He has lost his supper and part of his night's rest, and he knows that the blessed alarm clock will explode relentlessly in the morning without the slightest consideration for him.

* * *

If the members of a photographic society meet at eight o'clock for a lantern show, they will find the sun still mooning around high in the heavens. There will be all sorts of horrible dilemmas, confusions, and misunderstandings, until one night it is time to revert to the normal state of things. There are some who will appreciate that night, certainly. It will have its compensations. There will be loud cries of "Time, gentlemen, please!" And then amidst broad grins out will come watch-keys and clock-keys and sundial adjusters, and there will be two more precious hours ahead. Everyone will have two suppers and an extra two hours in bed. The early morning photographer will go out only to find it is time to go to business, and the sunset cloud merchant will find the sun gone and the moon shining before he gets to work on his iso plates. The whole idea is silly. I know a far better plan for giving people more leisure hours of daylight, and that is to abolish work. We could go out photographing then in peace, and have all the daylight we wanted without playing the fool with our timepieces. What do you think about it?

THE WALRUS.

SUBSCRIPTIONS.

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PHOTOGRAPHY. AUGUST 11TH, 1908.

PHOTOGRAPHY

A JOURNAL FOR EVERY CAMERA USER.

EDITED BY R. CHILD BAYLEY.

PUBLISHED WEEKLY.

AUGUST 11TH, 1908. TUESDAY. No. 1,031. VOL. XXVI.



AN OLD
STAGER.

BY
ALFRED
AND
MARIE
BRACEWELL.



EDITORIAL

Competitors: Home and Abroad.

This week sees the publication of the awards in no fewer than four of our competitions, and the large number of entries in each, in spite of the holiday season, shows how popular is this feature of the paper. Within the last few days several letters have reached us from foreign and colonial readers, complaining that they cannot enter for the competitions, because either the closing date comes before they can get their work into this country, or else the coupon is obsolete. We sympathise with the writers, and hope that the announcement we make below will go some way to meet their views.

In future entries from any colony or foreign country will be received in any of our competitions if they bear the coupon of that issue of the paper which in the ordinary course of things would be the last to reach the competitor before sending off his entries. So that if a reader in Timbuctoo, let us say, gets his *Photography and Focus* seven weeks after publication, he will still be able to compete in the regular monthly competitions by simply using the coupon in the last issue of the paper to come to hand. Readers may rely upon it that we shall not attempt to apply the rule in too rigid or harsh a manner, provided only they endeavour to the best of their ability to comply with it. All our regular competitions are thus open to distant readers, and if there are occasional competitions for which the notice given is too short for them, it will only be because they are of such a character that the results must be published quickly while interest is aroused. Such a competition as the "Advertisement Competition," for example, cannot be kept open more than two or three weeks; but our monthly competitions are known long enough in advance even for readers at the Antipodes.

The Camera for the Mountaineer.

In the good old times (which, by the by, are not so very long ago) no well-appointed caravan started without a porter specially engaged to carry the photographic outfit, with the heavy dark slides, plates, etc., only to find on arriving up the peak that, owing to the wind or cramped space, the stand could not be put into position. Thus writes Mr. Maurice Steinmann in the current number of the "Badminton Magazine." He goes on to point out that he now always carries a Kodak, giving a picture about 2in. by 3½in., since such a camera can be used in spots that are inaccessible for

a big camera. An isochromatic screen in Alpine work is often employed to good advantage, and for mountain views and glaciers, in which relief is everything, he strongly advocates the use of a stereoscopic camera.

Rules and Regulations.

Every week, under the heading, "Replies to Correspondents," we publish the few and simple rules by which any reader can obtain advice or assistance from the staff of *Photography and Focus*. Those rules are kept as few in number as is possible, and are drawn up to facilitate dealing with the questions, as these are so numerous that unless the work were systematised it would not be possible at all. Most enquirers comply with the rules, but every day there are a few that do not do so. May we remind readers that we cannot acknowledge or deal in any way with these latter. Nor can we accede to requests to reply by post. The only exception to this rule is in the case of queries marked "Urgent: Apparatus," and dealing with apparatus which the enquirer has on approval, or for the purchase of which he is negotiating. In these cases we endeavour to send a reply by post as promptly as possible, but in all others the reply can only be given in the paper.



MEMORANDA for the week

To send a postcard to the Birmingham Photographic Co., Limited, Stechford, Birmingham, for a free sample of their self-toning paper, Estona (see page xvi.)

Faded Silver Prints.

When a silver print has faded and yellowed until its image seems almost to have disappeared, it does not follow that the image is irrecoverable. As is well known, by photographing such a faded print, using an ordinary and not an orthochromatic plate for the purpose, the insensitiveness of the ordinary plate to yellow will enable one to get a copy which is much more vigorous than the original; and this method has the advantage that there is no need to remove the faded print from its mount, nor to submit it to any wetting or to any process which involves a risk of injuring it irretrievably. But it may not be so well known that in the mercury intensifier which is to be found in most dark rooms we have an agent which will often bring a faded silver print back almost to its original condition. It must first be removed from its mount, and should then be washed, alumed, and again washed, to avoid as completely as possible all risk of injury. The print is simply bleached in the ordinary five per cent. solution of mercuric chloride, washed, and placed in a five per cent. solution of sodium

sulphite. This brings back the image to a brown black colour, and nothing remains but to wash the print and dry it.

The Long Arm of Coincidence.

Mark Twain in one of his books gives an amusing description of how he was collaborating with a friend, and the two set to work to devise an improbable name for one of their characters. Finally we read the friend "asked me if I could imagine a person named 'Eschol Sellers.' Of course, I said I could not, without stimulants." Eschol Sellers the character was christened forthwith, and when the book had been out a week, a real man bearing the impossible name instituted a libel suit against the authors.

When our poet the other day sought for a trade name for his hand camera, to rhyme with "back," he manufactured "Klakk," on much the same principle. Yet we find the well-known Munich firm of Rietzschel have a camera which they term the "Clack." Of course, we need hardly say that no reference was intended to Messrs. Rietzschel's apparatus by the rhymers; but in case anyone should suppose that any such reference was intended, we may, perhaps, point out that the whole incident parallels that of "Eschol Sellers," except that instead of "instituting a libel suit," Messrs. Rietzschel write to tell us that the rhyme raised a hearty laugh at their offices. The "Clack" cameras are expected on the British market very shortly, when we hope to have an opportunity of reviewing them.

Photographing Machinery.

Most of the photographs of machinery which one sees about have the machine thrown up into excessive prominence by the simple device of blocking everything else out with opaque pigment on the negative. This requires a steady hand and some little skill if it is to be done well; and it is not everyone who can make a good negative of a machine who can block it out when done. To prevent the necessity of this, a white background will be found very useful; and if a little time is taken to fix it up properly, it may give as good an effect as, if not actually a better one than, the blocking out process. To secure this, the background

must be white—a sheet is as good as anything on this score. It must also be well lit, or, however white it may be, it will appear grey. It should not be too near the machine or shadows will be thrown upon it, and much of its effectiveness lost; lastly, it should be hung up so as to be as smooth as possible, and someone should be got to keep it moving a little during the exposure. If these points have attention, the print will show the machinery standing out as if blocked out, while the background will be a mere blank white behind it, free from any detail that may take the attention from the principal object or—and this is the reason for blocking out such subjects—may be mistaken for part of the machine itself.

In the club which includes in its membership Me
There are camera users of every degree,
And Wilkins is one of that curious kind
Whose characteristic is absence of mind.

Now Wilkins was out on his cycle one day,
And stopped for a picture he saw by the way.
He fixed up his camera, focussed all right,
Adjusted his aperture, tested the light.

Then found, as so often occurs on his rides,
He'd omitted to bring with him any dark slides,
For such is the absence of Wilkins's mind
That he always leaves something important behind.

So Wilkins rode off to his place of abode,
Leaving tripod and camera there by the road,
And when he returned with his slides later on,
As might be expected, the outfit was gone.

"Well, I'm bothered!" said Wilkins (and worse things besides).

"Must have left it at home, when I went for my slides."

And having deposited these on the grass
He went off again for his outfit. Alas!

It puzzles poor Wilkins extremely to know
How the whole of his things disappeared at one blow.
The police would have managed to trace them, no doubt—

But he can't recollect what it was he took out!

THE WEEK'S MEETINGS.

TUESDAY, AUGUST 11TH.

Birmingham P.S. Sutton Park and Streetly.
Batley & D.P.S. Heath Hall Park.

WEDNESDAY, AUGUST 12TH.

Devonport C.C. Chaddlewood.
North Middlesex P.S. Principles of Composition. Messrs. A. & F. Read.
Ashton-under-Lyne P.S. Committee Meeting.
Windsor P.S. Porthcawl.
Leeds C.C. "Still Life Photography." William Handley.

SATURDAY, AUGUST 15TH.

Bourneville & D.P.S. Ham-ton-in-Arden.
Manchester A.P.S. Lichfield.
Southampton C.C. Christchurch and its Priory.
Glasgow Southern P.A. Bowling

SATURDAY, AUGUST 15TH (continued).

Small Heath P.S. Lapworth.
Govan C.C. Saltcoats Harbour.
Maldstone & Institute C.C. Hillingbourne and Leeds.
Borough Polytechnic P.S. Southfleet.
Barrow-in-Furness Naturalists' Field Club. Aldingham.
U. Stereoscopic S. Kew Gardens.
Nelson C.C. Annual Club Outing.
Wallasey A.P.S. Burton.
Photo Art Club (Aberdeen). Pitmedden.
Halifax C.C. Across Ogdon to Fly Flats.
Preston C.C. Rissington.

MONDAY, AUGUST 17TH

Bowes Park & District Photographic Society. Affiliation Lantern Slides.
Walthamstow P.S. Discussion and Print Criticism.

Societies will have their meetings announced here if the syllabus is sent to us at the beginning of the Session, or from time to time

Finding Out What is Wrong.

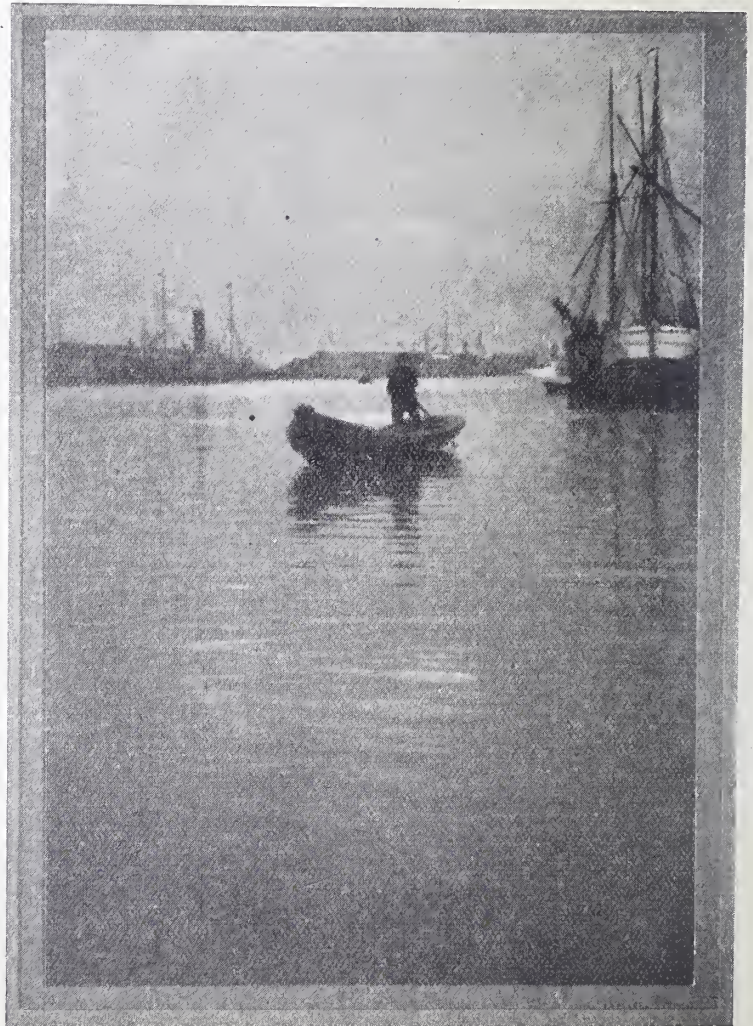
When a negative is not what it should be, the first step to take is to ascertain the cause of the trouble. This article, specially written for "Photography and Focus," shows how this can be done.

HOWEVER careful the amateur photographer may be, he will inevitably get his share of defects in negatives and prints; and doing so, I have no doubt he will welcome anything that will help him to discover what is wrong, and so either remedy it in the present, or prevent it in the future. The power to diagnose the ills that plates and prints are heirs to is one which for every reason should be cultivated. Let us take the case of defective negatives first.

Here, then, is a negative which at one end and in the middle looks as if it ought to be a good one, yet at the other, starting right at the edge and darting spear-like into the image, are streaks of black, which quite ruin any print from it. The plate has been light-fogged, and that not by an unsafe dark room light, which would have fogged it evenly all over, but by light that has got into it while it was supposed to be protected from it, either in the box or the camera or dark slide. Having diagnosed the case, and it is an extremely easy one, we must

endeavour to find out precisely where the trouble arose. It is well to put the negative back in the slide or camera in which it was exposed, in its original position, not forgetting that the picture is upside down on the screen. We may then be able to see how the light got to it. If the light starts well at one corner of the plate, and that at the end at which the shutter of the dark slide draws right out, it is very possibly due to the shutter not being quite square when it was replaced, one corner of it entering the light trap at the top of the dark slide and opening it. One of the fasteners of a book-form dark slide may have come undone and let in light; or a sharp edge of the plate may have pierced the bag of a bag changing-box. In this last case, most, if not all, plates subsequently exposed will show signs of the fog, and it will always start from the same corner of the plate, relatively to the picture. A more puzzling case is when it starts from one corner, and occurs with two or more plates, but these corners are not always the same as regards the picture. This indicates that light has got to the plates while they have been in the plate box or packed up, probably from the angle of the box getting broken and the corner of the plates cutting the paper wrapping.

So much for well defined light fog. But here is a plate which appears to have one half of it foggy, but there is no such distinct edge to the fog. It goes right up and over the part which was protected by the



The Boatman.

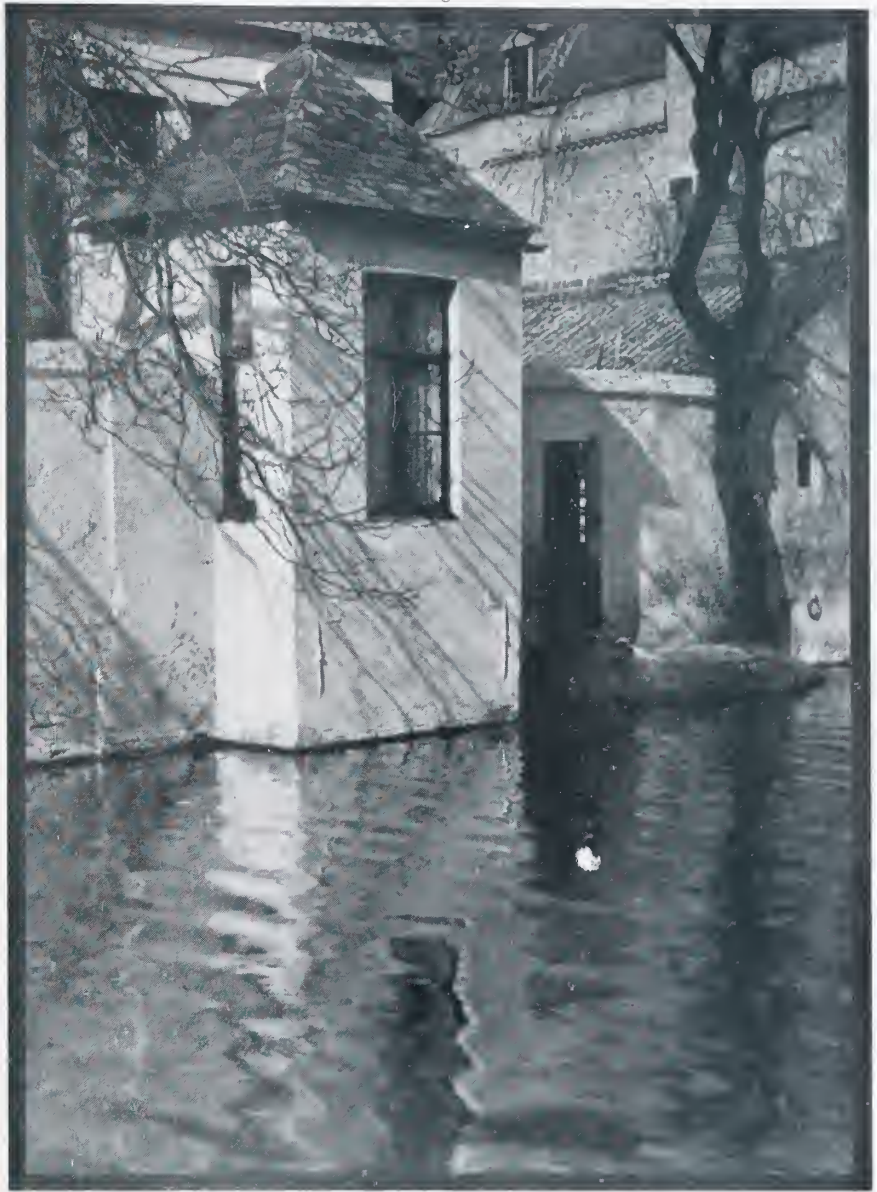
By Robert Marshall.

rebat of the slide, and extends perhaps halfway across the plate, ending in an ill-defined but more or less straight line. Let us rehearse the development again, putting dish and dark room lamp where they were at the time, and placing the negative in the dish the same way round that we had it as we watched the picture come up. Ah, I thought so. The dish is close in front of the lamp, and the rim of the dish casts a well-defined shadow on the plate, the edge of which corresponds with the edge of the fog. The vignetting off of the fog we brought about by rocking the dish. Clearly the dark room lamp is not safe, or else the plate was exposed to it much too long.

The next case is still more puzzling. The marks look like light fog, it is true; but they do not extend over the parts which were covered by the rebat of the slide, or the edges of the sheaths, and their outlines are not sharp, but very much diffused, and are curved. The fog may appear in the form of two or three crescents, more or less regular, and disposed apparently with some relation to the centre of the plate. This is not so common a defect as the others, and is only met with when a faulty between-lens shutter is used; and means that the shutter must be repaired.

Once more we have a patch of fog, but this time it is perfectly circular in shape, possibly with quite sharp edges, but more often blurred. It may not occur with every exposure, but we always get it when there is a very strong patch of light in our subject and the rest of it is dark. This is "flare-spot," and is a sign that the lens is defective and must go back to its maker. Hardly any lens is *absolutely* free from it, and if we turn the camera so that the sun shines into the lens we shall see a flare-spot to a certainty; but it ought not to be perceptible under ordinary conditions.

A number of negatives were shown me some years ago, which seemed to be suffering from flare-spot to a most aggravating extent, yet it came and went most capriciously. They were on roll film, exposed in a folding camera; and as if to encourage the expenditure of film, if ever two exposures were made on the same subject, the second was invariably quite free from flare-spot, although the first had it badly. This very peculiarity gave the clue, and enabled the defect to be diagnosed. It was the shutter, not the lens, that was at fault. It had a slight leakage of light, and when the



SONLIT.

BY EDWIN MARKS

Awarded a Certificate in the Advanced Workers' Competition for June.

camera was carried about shut up for any length of time, with the film for the next exposure close to the back of the lens, this light fogged it, and, owing to the projecting metal mount of the lens being very near the surface of the film, it was only able to fog it in a little circular patch the size of the lens, which patch masqueraded very successfully as a flare-spot. As soon as the cause was discovered and the shutter put right, the trouble vanished. The second exposure, in every case, being wound off before closing the camera, was not affected; and it was by reasoning from this that the trouble was located, as I have already mentioned.

The next defect takes the form of a curious irregularity between the density of the edges and the centre of the plate. At the two ends the picture seems strong and vigorous, while at the centre it is weak. Or the exact opposite may be the case. This defect does not show in every exposure, by any means; but is most



THE CONNOISSEURS.

Awarded the Bronze Plaque in the June Advanced Workers' Competition.

BY SYDNEY H. CARR.

conspicuous when the exposures have been short. This is caused by the use of a lens made to cover a plate much larger than the one employed. The result is that a great deal of light is thrown on the bellows inside the camera when an exposure is made, and this light is reflected by them on to the plate, where it fogs it. If the bellows happen to be at such an angle that the light is thrown towards the middle of the plate, this may be darker and stronger than the edges; but in either case the cause is the same. The remedy is to reblack the interior of the camera, and, if possible, to use a hood on the lens.

A broad band of fog, with perfectly straight and almost sharp edges, crosses this negative squarely, nearer to one end of it than the other. If we put the plate back into the dark slide, we shall see that the band of fog coincides exactly with the strip of fabric or leather which forms the hinge of the shutter of the slide. Some deleterious emanation from this hinge has affected the plate, it is quite evident; and the slide must have the hinge removed and a fresh one substituted for it.

Quite different is the defect which we are next called upon to diagnose. Here we have a curious difference in density between some parts of the picture and the rest. The boundaries of these parts are always a perfectly distinct sharp line, but this is rarely quite straight, its outline being generally a smooth gentle

curve. Sometimes there may be a round or oval patch on the plate, which differs from the rest in density, but always with well-defined edges, and very rarely a perfect circle in shape. Once clearly understood, this trouble will leave us in little or no doubt in the future. It is due to the use of an insufficient quantity of developer, and, as a result, part of the plate was covered an appreciable time before the rest.

Spots are the trouble in this negative also. But here the spots are invariably lighter in colour than their surroundings, and invariably also are they strictly circular in outline, and never more than a quarter of an inch in diameter. generally much less. The regularity of their shape reveals to us at once that they are

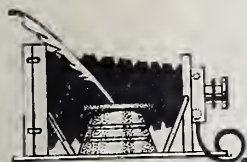
caused by air bells adhering to the plate when the developer was first poured on.

In addition to these, which are some of the troubles most likely to arise in negative making, there are others which may be much more puzzling at first. The best advice that can be given in such cases is to rehearse the proceedings and to keep a sharp look-out for clues. It should be borne in mind that, while wood, leather, metal, paper, and other substances do not, as a rule, affect the sensitive surface of a plate, they all may do so at times. Emanations from them may distinctly fog it, although they are not actually in contact. A curious fairly sharp black line which appeared on some negatives recently was a case of this kind. It never appeared more than once in the same series of exposures—made in a magazine camera of the ordinary "guinea" type, it was always in exactly the same position on the plate, and always of precisely the same shape and size. Careful examination of the sheaths showed that a corresponding line was scratched on the back of one of them, leaving the metal bare; and there is no doubt that from that bright metal there was some kind of emanation, which fogged the plate in the next sheath to it, although that plate was quite a fiftieth of an inch away from it, if not more. Printed matter will set off in the same way, actual contact in this case also not being necessary, though if the print is in contact with the plate the action is very much more rapid. The one

good point about troubles of this kind is that the defects are usually of some well-defined size and shape, enabling their cause to be traced with comparative ease when once the photographer is put on the track.

The aim of this article has been to put him on the track and to enable him to help himself when he gets into difficulties, by giving his efforts to discover their cause and to remove it some definite system and method. Not only is it much more satisfactory for the amateur to find out himself where he is wrong and to put matters

right, but he is generally much better able to do so with his own failures than some expert friend whose actual photographic knowledge may be much greater; because the amateur alone knows how every step in his proceedings was taken. The expert is often in the position of the prophet, who not only had to give the interpretation of the dream, but had to recall the dream itself to the memory of the monarch; and, with the best will in the world to help his friend, he may find the task beyond him.



The Birth of Photography.

Some Interesting Postcards.



IT is a justifiable source of pride to the French that three at least of the most prominent names in the early history of photography are those of Frenchmen, two of whom are regarded as indeed the fathers of photography as we now know it. These are Niepce and Daguerre.

A third, Poitevin, although his work is of a later date, was none the less a most fertile inventor and painstaking investigator of novel methods.

The well-known publishing house of Charles Mendel, of 118, Rue d'Assas, Paris, has just issued a most interesting set of picture postcards of memorials of men to whom photographers owe so much. Some of these, by the courtesy of M. Mendel, we are enabled to reproduce this week on page 290. The full set of twelve cards can be obtained from the address given, post free to England, for eleven penny stamps, and is one which all photographers who are interested in the birth of their hobby, or are collectors of picture postcards, should possess.

"And who was Niepce?" some reader may ask. There were two of the name who played a large part in photographic discovery—Joseph Nicéphore Niepce and Abel Niepce de St. Victor—uncle and nephew. Joseph was born at Châlon-sur-Saône in March, 1765, and served the Republic as a soldier in the war in Italy in 1793. In 1813 he turned his attention to lithography, and in the course of his experiments he found that bitumen was sensitive to light, and that after exposure it was no longer soluble in some of the liquids, which, before exposure, dissolved it freely. Nine years later he was able to make prints on metal by this means, and in 1824 he is said to have made a picture in the camera, which if authentic would be the first so obtained. In 1827 Niepce came to England, and wished to submit his results to the Royal Society, but as he kept the details of the process secret his offer was refused. Two years later he entered into an agreement with Daguerre to work out a photographic process, and on July 5th, 1833, he died. The agreement was transferred to his son Isidore, and when Daguerre's process was purchased

by the French Government, both Daguerre and Isidore Niepce received pensions. A statue to Niepce, reproduced on page 290, was erected at Châlon-sur-Saône, and an interesting collection of his apparatus and results is to be seen in the museum there.

Daguerre's part in the evolution of photography is much more generally known. For fifteen years he experimented, and in 1839 he was able to publish full details of the process which bears his name. In Daguerreotype a highly-polished silver plate was made sensitive by submitting it to the fumes of iodine (bromine was used later), and after exposure in the camera was "developed" by being treated with mercury vapour. The process was highly original, and was rapid enough for portraiture and even for so-called "instantaneous" work, and for several years was extensively used. Eventually, it was supplanted by the wet collodion, which gave prints on paper—a thing the Daguerreotype could not do—and this in turn by the modern dry plate process, with which all our readers are familiar. Daguerreotype was the predecessor rather than the ancestor of modern methods, as there is no parallel or connection between development with mercury vapour and development with pyro or the other reagents used to-day.

Louis Alphonse Poitevin was a chemist and engineer, who was born in 1819 and died in 1882. He first seems to have turned his attention to electrotyping Daguerreotypes, but later gave most of it to investigating the action of gelatino-bichromate. This led him to discover a process of carbon printing, and he also invented photo-lithography and collotype. He was the originator of oil-printing, which lay dormant for many years until resuscitated by Mr. Rawlins. Poitevin studied the ferro-prussiate and dusting-on processes; and it may truly be said that he did not turn his attention to one of them without leaving the imprint of his practical inventive mind upon it.

In Niepce, Daguerre, and Poitevin, the French have a group of workers of which they may be justly proud—worthy predecessors of the Lippmann and of the Lumière of to-day.

The Title Competition. Results.

The Winning Title, "Making the Best of Them."

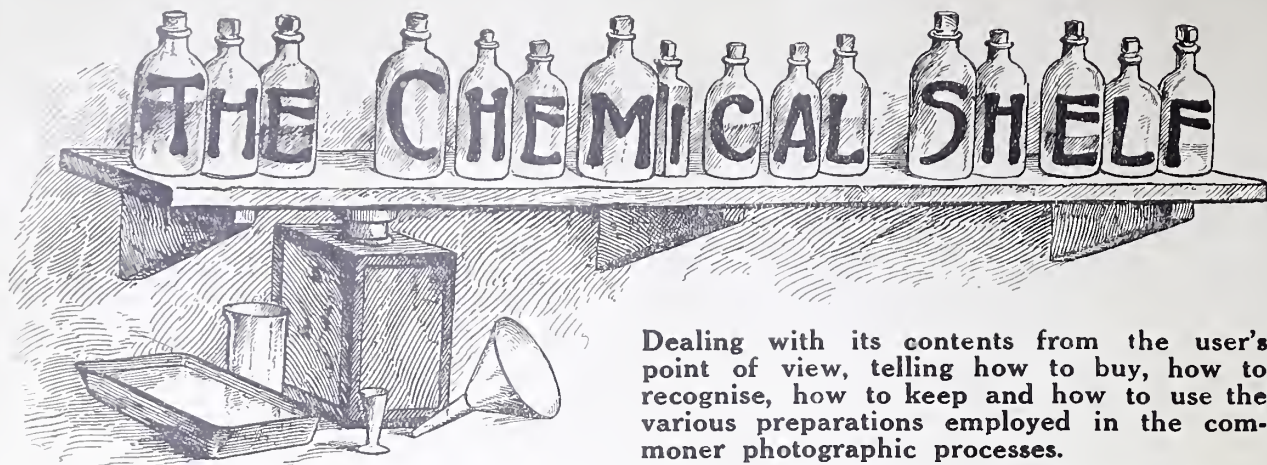
WE have received several complaints that Mr. Wastell's own title for his picture of the flower seller was the only satisfactory one; and we are afraid that a good many who did not complain to us at least experienced a good deal of difficulty in finding a title, since the entries for this competition have been much fewer than usual, and the holidays will not hardly account for the whole of the falling off.

The total amount for distribution is £6 12s., divided into one prize of £2 4s. and four of £1 2s.

A cheque for two pounds four shillings has accordingly

been sent to K. Dalglish, of 25, Merton Hill Road, Wimbledon, whose title "Making the best of them" was judged to be the best sent in.

"The pick of the bunch" was the title suggested by Miss E. A. Vendall, of 6, Denton Drive, Liscard, Cheshire, and by John Simpson, jun., of 25, Archer Street, West Hartlepool. "Making the most of 'em" was suggested by R. Ardley, of 12, Fernleigh Road, Winchmore Hill, N., and "A London Institution," by Edward L. Wickin, of 23, Evandale Road, Brixton, S.W. To each of these competitors a cheque for £1 2s. has accordingly been sent.



MERCURIC IODIDE.

Mercuric iodide or iodide of mercury is a brilliant scarlet salt, which can be obtained at most chemists', and keeps in the dry state indefinitely. It is not soluble in water, but is soluble in a solution of potassium iodide, in which form it may be kept ready for use. It is soluble in a solution of sodium sulphite also, and this is the form in which it is used as an intensifier; but this solution does not keep, and must therefore be freshly prepared as required.

There is no need to purchase mercuric iodide, as such, as a solution of it is easily prepared by mixing solutions of mercuric chloride and potassium iodide, as described below.

The only use of mercuric iodide in photography is as an intensifier. It has one great advantage over other forms of mercurial intensification, in that the photographer can see what he is about all the time. There is no bleaching and subsequent blackening, but the negative gradually gains in vigour, and may be taken out when it is seen to be dense enough. The dish should be rocked during the operation, and when the intensification has gone far enough the plate is to be taken out and washed in water and weak hydrochloric acid, as directed for mercuric chloride. It should have its surface rubbed gently with cotton wool. It should

then be placed for ten minutes, in daylight, in any ordinary alkaline developer as used for plates. This may or may not produce a visible change, but is a necessity if the intensification is to be permanent. The negative is then washed and dried. This is an excellent intensifier for under-exposed plates.

FORMULÆ.

Solution of Mercuric Iodide

Mercuric chloride (2½% solution)...	2 ounces
Potassium iodide (10% solution)...	5 drams
Water to make	5 ounces

This is Bennett's formula. The solution keeps indefinitely, and each dram of it contains one grain of mercuric iodide. In the formula below, therefore, one dram of this solution may be substituted for the grain of mercuric iodide.

Mercuric Iodide Intensifier.

Mercuric iodide	1 grain
Sodium sulphite	20 grains
Water	1 ounce

The sulphite is dissolved first, and then the mercuric iodide added. After use the solution should be thrown away.

The Beginners' Competition. Awards for July.

INTEREST in the Beginners' Competition, in spite of the holiday season, when many are away and thinking of other things than photographic competitions, is very well maintained this month, and both numbers and quality were up to the level reached on previous occasions.

These have always been the most popular of our competitions—a fact that may fairly be attributed to the rules which limit entries to direct “unfaked” prints of small size. The impression that to be successful a print must have a lot of dodging or handwork on it, and that large prints stand a much better chance of securing awards than do small ones, is very widespread, and there is therefore a

justifiable feeling in favour of a competition where the rules are expressly framed to meet these two particular points. The following are the awards:

FIRST PRIZE, a signed copy of “The Complete Photographer.”—“Meditation,” by S. M. Pike, 43, Richmond Avenue, Merton Park, London, S.W.

SECOND PRIZE, a free subscription to *Photography and Focus* for twelve months.—“A Pioneer,” by W. J. Chapman, Stawell, Victoria, Australia.

Certificates have been awarded to W. W. Fuller, of 16, Irvine Road, Colchester, for “An Anxious Moment,” and to A. H. Leeves, Broad Oak Park, Worsley, near Manchester, for “After Rain.”

The Advanced Workers' Competition. Awards for July.

THE numbers in this competition, speaking from memory, are a little down as compared with last month—a result which we always anticipate in July and August, when so many of our readers are away on their holidays. There was no falling off in quality, however, which is as high as we have ever known it. We hope to see a goodly proportion of the pictures from this month's competition in the R.P.S. exhibition this autumn: there are certainly a good many which would stand an excellent chance of acceptance.

The criticism is in hand, and we hope that by the middle of the month most of the prints which were accompanied by stamped wrappers or labels will be returned to the senders.

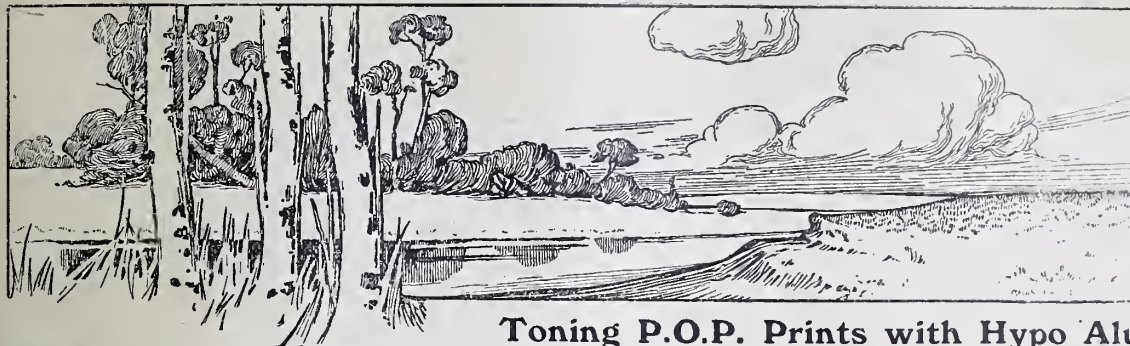
Awards.

FIRST PRIZE, *Photography* silver plaque.—“Leisure Moments.” G. W. Dunn, 215, Lightbourne Road, Moston, Manchester.

SECOND PRIZE, *Photography* bronze plaque.—“The Deserted Mill.” Harry Lindoe, 31, Wayman Street, Sunderland.

THIRD PRIZE, *Photography* bronze medal.—“The Minstrel.” Arthur Dolden, Newhaven, Maple Road, Leytonstone.

Certificates.—“The Mill Pool,” T. C. Beynon, Cheriton, Newbury; and “A Silvery Path,” William Findlay, 110, Leaside Road, Aberdeen.



Toning P.O.P. Prints with Hypo Alum.

SINCE we published the experiences of some of our readers who had succeeded in getting very satisfactory results on P.O.P. by toning it in hypo-alum just as bromide prints are toned, a great many photographers have been working the process. Some have had no difficulty in doing so, but others have been less fortunate. We give below extracts from two letters which have reached us during the past few days, in the hope that someone who has had an extended experience of the process may, perchance, be able to help our correspondents.

"On July 7th," writes one of them, "under the heading of 'Correspondence,' you published a letter from Mr. H. Jeffreys on the hypo-alum toning of P.O.P. Well! I followed his advice and made up the bath exactly as prescribed. The result was a dozen spoilt prints (portraits). I then exposed two pieces of P.O.P. in sections, and toned them exactly as I did the portraits, with the same results. They explain themselves, as you can see from the enclosed. The larger one was washed before being toned, while the small one had no previous washing. I also found that the larger one changed *considerably* after removal from the toning bath, turning absolutely yellow all over, while before drying only one section was yellow.

"The great fault, and one which makes the use of this bath impossible, is this: The half-tones, especially the lighter ones, go through the whole range of toning from orange brown through purple to yellow before the darker parts have even taken on a satisfactory brown. This is especially noticeable with vignettied prints, which get quite a yellow rim all round.

"Should your correspondent not have had this trouble, I should be very pleased if he could point out to me what causes it in my case, or how the discolouration could be removed from the prints."

So far this correspondent, whose prints accompanying the letter bear out his description very faithfully. The other letter is very similar.

It says: "Seeing an account of the hypo-alum bath for P.O.P. in your paper, I thought I would try it. (1.) The first batch I put into the bath without washing. Result: The darker portions of the print were a pleasing brown, but the lighter parts were muddy and yellowed. (2.) The second batch was put into the bath after fifteen minutes good wash-

ing. Result: Practically the same—still the same dirty yellows and browns. (3.) After fifteen minutes washing I put a third batch of prints into one ounce of salt in ten ounces of water for five minutes, and then into the hypo-alum bath. I enclose a print showing the result—a good tone in the shadows, but bad in the high lights. I should be very glad if you could suggest a cause for this. The hypo-alum bath employed consisted of hypo six ounces, alum an ounce and a half, water forty ounces."

Our own experience of the process has only been a very limited one, but we had no trouble of the kind described by our correspondents. Perhaps this may have been due to one great difference between our procedure and theirs. The prints were first well washed in the usual way, then fixed in clean hypo and rinsed, and not until this had been done was any attempt made to tone them with hypo-alum.

Such a course seemed to us to be the only one which promised success, and indeed a perfectly natural one. It is only on the developed and fixed bromide print that we attempted to try the hypo-alum toner. The whites of such a print are, or should be, quite free from silver or any silver compound; there is nothing there for the sulphuretting agent to attack. Nor in the case of bromide prints does it matter if the toning of the lighter parts takes place before that of the shadows. The toning action is a definite one, and when the lighter parts have toned as far as they will go, it simply ceases there, while it goes on in the shadows until they, too, are fully toned.

The case of a P.O.P. print as it leaves the printing frame is quite different. The half-tones and the high lights not only contain a great deal of unaltered silver salts of a soluble character, which are removed by the preliminary washing, but they also contain insoluble silver salts, chloride, and others, of which no amount of washing will get rid. The salts are held in the gelatine, and are only removed by the hypo, and it certainly seems a most dangerous course to pursue to place the print in any sulphuretting bath, such as hypo-alum, while they are still present in it.

Curiously enough, both the writers who are quoted above, while making several experiments in the endeavour to overcome their difficulties, did not try to fix the prints first. Perhaps had they done so they would have found it what they wanted. But, as we have already said, we shall be glad to hear the views of those who have had more experience of the process.

A New Tabloid Outfit by Messrs. Burroughs, Wellcome, and Co.

A TABLOID outfit of a very compact and attractive character has just been added to the list of Messrs. Burroughs, Wellcome, and Co.'s products. The box which contains it is substantially made of enamelled metal, with a hinged lid, and measures 4in. x 4in. x 2½in. Within these narrow limits will be found one regular package of each of the following tabloid chemicals: Metol-quinol developer, pyro developer, combined toner and fixer, hypo, and potassium bromide; so that the outfit contains an ample supply of all the chemicals required for developing negatives,

bromide prints, and gaslight prints, and for toning and fixing P.O.P.

A booklet of directions showing precisely how each of the preparations is to be used also fits in the case, and makes the whole set as neat and attractive an outfit as could possibly be desired. If we might venture on a prophecy, we should say that many a tourist's bag this summer will contain one of these sets, and we could go further, and add that those who take one with them on their holiday will not regret it. The cost of the complete outfit is 5s.



THE LATEST IN APPARATUS & MATERIAL.

Messrs. Griffin's Materials for Oil Printing.

ALMOST from the very first the firm of John J. Griffin and Sons, Ltd., of Kingsway, London, W.C., has identified itself with the oil process, and it has been able to do this all the more completely that it has had the co-operation of Mr. G. E. H. Rawlins who is mainly responsible for the resuscitation in its modern form of one of the oldest of printing methods. The gelatinised paper, the pigments, and the brushes, which constitute the whole of the apparatus required for working the process, are prepared under the direction of Mr. Rawlins.

One of the difficulties of the early workers in oil was in the selection of suitable paper for the process, and the different double transfer carbon papers were largely drawn upon for the purpose. Now there is no need to employ any such makeshift appliances. Messrs. Griffin supply paper specially prepared for oil printing, and known by the descriptive, if not very euphonious, name of Pigmoil paper. The Pigmoil papers are of two kinds, rough and smooth. A packet of a dozen pieces in whole plate size sells at two shillings, and other sizes at proportionate prices. The paper is supplied insensitive, and is sensitised shortly before use by immersion for at least two minutes in the sensitising bath given in the next column.

The potassium citrate and the citric acid are dissolved together in part of the water, and are then added to the

bichromate, which has been dissolved in the remainder. Messrs. Griffin supply this bath in concentrated form, only requiring dilution with its own bulk of water to make it ready for use.

For the pigmenting process Messrs. Griffin supply specially prepared colours—engraving black, burnt amber, Venetian red, green, and blue—price one shilling per tube; and they also issue a very convenient little oil printing outfit, which in half-plate size costs six shillings.

SENSITISING BATH.

Potassium bichromate	...	...	80 grains
Potassium citrate	...	...	1 ounce
Citric acid	...	...	40 grains
Water	...	...	10 ounces

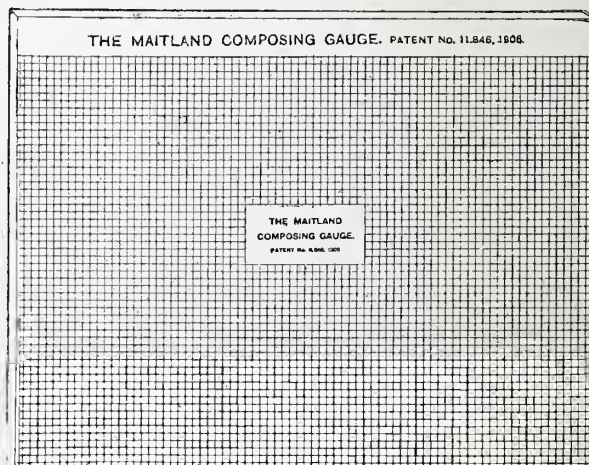
The ozobrome-oil printing process, which is often referred to as Bromoil, is a method of converting a bromide into an oil print, and is convenient for those whose original negatives are small in size. Messrs. Griffin are to the front in this process also, and supply a special bromide paper for the purpose and a Bromoil solution for treating the bromide print before pigmenting it. This Bromoil bromide paper is supplied in all sizes at very reasonable prices, the packet of four pieces 12 by 10 costing 1s. 3d. The special Bromoil bleaching solution sells at 1s. 3d. per bottle.

The Maitland Composing Gauge.

VISCOUNT MAITLAND has invented and patented a little piece of apparatus, which is being put on the market by Messrs. W. Butcher and Sons, Ltd., of Camera House, Farringdon Avenue, London, E.C., under the name of the "Maitland Composing Gauge." It is intended to assist photographers in selecting the part of a print which they wish to keep and in marking it for trimming purposes, which it does in a very simple but very convenient manner.

The gauge takes the form of a block or pad containing a number of sheets of transparent paper, ruled with a series of black lines, equidistant, and at right angles to each other. One of these sheets is laid over the untrimmed print, which can be seen quite clearly through it, and in this way the boundaries of the finished picture may be decided. When this is done, a pin or needle may be used as a prickler to mark the four corners to which the print is to be trimmed. The pricks are made right through both gauge and print, the rulings making it a very easy matter to get the sides of the print square. One of the sheets of the gauge can be used for a great number of prints of the most varied sizes, the gauge dealing, in fact, with any size of print up to 9in. x 7in., or a little larger.

The gauge may also be employed for cutting masks or similar work, and is handy in making copies or designs, as the ruling makes it very easy to mark off the positions of the principal points. It is an extremely simple little device,



but, like many more to which that epithet may be applied, it is decidedly useful. A pad of twelve sheets, with full instructions for use, sells at 1s.

Insect Life and the Camera.

By Carrie Percival-Wiseman. Special to "Photography and Focus."



THE photography of insects at work and at play opens out a wide field for amateur photographers, and one that has been but little explored. Yet it is a fascinating one, and offers many opportunities that are within the reach of any.

To do full justice to the little creatures, they should be taken in their own haunts and under perfectly natural conditions. If this is to be done—and chances when once they occur are not to be missed—one important point must be borne in mind—that is, never to be without a few plates in the dark slides, ready for immediate use. If the slides are good ones and are kept in a dry place, the plates will remain in them in good condition for a long time. This is fortunate, as insect photography is made up of sudden opportunities, such as very often will not offer themselves again.

Rapid orthochromatic plates must be used, as, of course, many of the subjects are brightly coloured. They must be very fast ones, as the restlessness of the sitters calls for the shortest possible exposure. A yellow screen would no doubt be an advantage, but the occasions when it could be used are very few. Owing to their diminutive size, the insects have to be taken at very close quarters, and as good definition is essential, this entails stopping down, with a proportionately long exposure. Added to this is the further risk of movement from any breeze, however faint, that may be blowing at the time.

The green-veined white butterfly in the photograph is life size, and needed four seconds exposure at $f/22$, without a colour screen. Moreover, I had only just time to secure the picture before the butterfly flew away.

The "control" method recommended by some writers for photographing butterflies was tried in the case of the small "Blue." It was caught late in the day, and carefully placed in a large jam glass with flowers, on which it settled down for the night. Next morning, having posed the sleepy fly,

according to instructions, near a window, I retired under the cloth to finish focussing. But, lo and behold! no insect was there. Emerging hastily, I was just in time to see a small blue thing fluttering gaily up to the window in the roof of the studio. Its recapture can only be described as a work of time and *climb*. On being released in the open air, it alighted on a rose bush, and its portrait was forthwith obtained.



"Common Blue."

Mason Bee (*Osmia Rufa*).

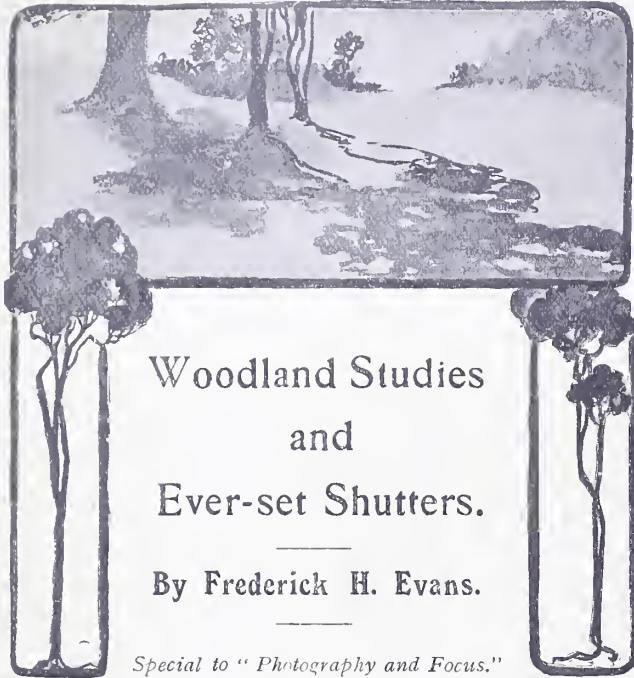


Green-veined White.

The mason bee was such a restless sitter that the focussing could only be done as she went in and out of her nest-hole. When the slide was drawn and all was in readiness, I waited, bulb in hand, for the bee to return to her nest. It was soon evident that she intended darting in far too quickly to give a chance for a picture. The hole was therefore temporarily covered up with a piece of paper, and a photograph was secured in the moment's delay that this occasioned.

If the insects are to be taken life size, a camera with considerable extension of bellows is absolutely necessary. Although quarter-plates are generally large enough for these subjects, it is best to use a half-plate lens, in order to get a fair-sized image without having to go too close to the object.

It is the practice with some insect photographers to simulate nature by posing dead insects on flowers, with more or less success; but no matter how skilfully this is done, there must always be something lacking that life alone can give.



BY a curious coincidence, within a few pages of a recent issue of *Photography* there was both a need expressed and the need supplied, but both unconsciously.

In an article on woodland photography the writer advocates a shutter for exposing—I suppose as superior to the cap, as it can be reset for a further exposure if necessary. In my own experience I have found this a most dangerous practice, to re-set a shutter for repeated exposures; very rarely can the tripod legs be set firm enough for no risk of moving the camera and doubling the image to occur from this re-setting of the shutter. And the time spent in the re-setting, time taken from the patient watching of the foliage, is pure waste, when it can all be avoided by the use of an ever-set shutter. For years I used the T.P. silent studio variety of shutter for this work, adding it to the front of the lens. As this needs only a repeated pressure of the bulb, one need not relax the ceaseless watching of the subject, watching for the occasional half-second of perfect stillness, knowing that no jar or movement of the camera is possible, and that any length of exposure is under full control. It is best to make these repeated exposures as short as possible—say in quarter and half-seconds—as it is very difficult to make sure, not only of absolute stillness all over the subject, but that the pendulum-like movement of branches has left them in the exact position of the first exposure. Errors

of this kind are obviously less hurtful in quarter or half-seconds than in those of one to three seconds or more. A good deal of my work for the past three years has included buildings surrounded by trees, and a shutter of this type is an absolute necessity. I have often divided up a twenty or thirty second exposure into quarter-seconds, each patiently waited for; but it called for patience only, ceaseless watching, eyes roving over the whole of the subject, and the bulb in one's hand ready to be pressed whenever the still quarter-second happened, perhaps occupying a quarter of an hour or more before completing the exposure.

On the advent of the Central shutter—which you described and extolled on the succeeding leaf to that containing the article on woodland work—I installed it in place of the studio shutter I had used till then; it is neater, more compact, more easily adjusted to varying lens fronts, and so absolutely jarless in its movements as to make it a quite perfect accessory.

An absolutely windless day is so rare that one cannot possibly wait for it; one can only be decently grateful if it happens when we have tree subjects in hand; but with this Central shutter one need not give up any work of the kind, except in tornado weather.

I was driven to this type of added shutter because makers would not listen to my demands and include the movement in their between-lens shutters. Neither my Unicum, Volute, nor Sector had it; consequently



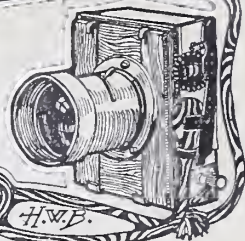
Privet Hawk Moth. See Insect Life and the Camera (page 283).

an added shutter became a necessity. But recently the makers of the Compound, another new shutter, have seen the wisdom of including this ever-set movement, so that on one set of lenses (Zeiss Protar) I am able to do without an added shutter for foliage work, as the Compound (between-lens) shutter provides for it; as, indeed, should all between-lens shutters, it being one of the most valuable aids to the landscape photographer.

The Finish of a Hundred Yards Race.

BY ADOLPHE ABRAHAM, B.A.

The sixth of a series of short articles on focal plane photography. Preceding articles appeared in "Photography & Focus" July 14 and 28.



THE finish of the hundred yards race has the advantage over the start, in that any handicap race will do for the photographer's purpose, whilst the less frequently encountered scratch race is a *sine quâ non* if a photograph of the start is required. I do not think that there can be any doubt that the ideal position from which to take the finish is as nearly straight as is practicable. One naturally desires to secure the figures as large as possible, and therefore one stands as near to the tape as width of plate and number of runners allow. I would here point out that if the photographer is not sufficiently generous regarding margins it is always a runner on one of the extreme sides who repays him by coming in first and spoiling the photograph.

The problem, therefore, is how to stand in the middle of the track, pretty close to the runners, and yet without mishap. The consequences of an eleven-stone man with a velocity of ten yards a second crashing into the camera and its operator are not pleasant. Yet the correct position is easy to adopt.

The strings which separate the sprinters are attached to upright poles close to the finish. Starting at one of the two

centre uprights, one should walk straight back to the distance selected. When the men finish, they will run easily right and left past him. I have often seen a big field camera erected in such a position without anything untoward occurring.

If it is compulsory to take a picture from one side, it is well to try to find out on which side is the likely winner, and then to select the side opposite to him.



Exposure is made, of course, as the winner breaks the tape. The duration of the exposure will depend on the proximity of the camera to the finish. If one is as near as the width of field will permit, 1-400s. will give a sharp image with a little blurring of the feet; probably 1-800s. will give perfect sharpness.

The Photographer's Handbook. By C. Harrison and J. C. Douglas.

JUSTIFICATION for the addition of one more to the long list of elementary handbooks of photography must be found in the fact that Mr. John Lane is issuing a series of "Country Handbooks," in which the various outdoor occupations—sailing, tramping, fishing, and so on—are represented, and in which amateur photography may well find a place. "The Photographer's Handbook," by C. Harrison and J. C. Douglas, has accordingly made its appearance—a very neat appearance in light green cloth, gilt, by the way—at the price of three shillings nett.

The illustrations, which are very bright and effective, and quite the best part of the book, are the work of Mr. Douglas; the responsibility for a great number of most aggressive split infinitives in the text we cannot locate. For the rest a brief account of the ordinary forms of photographic work has been got into a hundred and fifty pages. To much of this no exception can be taken, but some of the information is, to say the least, very curiously worded. Thus in the chapter on the lens we read, "Curvature is a cushion or saucer-shaped appearance which the focussed image presents upon the ground glass." A good deal of the obscurity of this and similar passages seems to be attributable to the compression to which the matter has been subjected to bring it within the limits of the series: and the authors, therefore, can hardly bear all the blame for it.

But where the space was so circumscribed it seems a pity to devote any of it to such topics as the manufacture of dry plates on a small scale, a sketch of which operation, as conducted twenty or thirty years ago, occupies the best part of a page.

The method of ascertaining the increased exposure when using a colour screen, we may point out, is altogether misleading. We are told to place the screen over the exposure meter paper and find out how much longer the paper takes to darken. If we get the standard tint in ten seconds without the screen, while it takes thirty seconds to reach the same tint beneath the screen, "then the screen exactly triples the exposure!" A very slight acquaintance with orthochromatic work would be sufficient to show that there is no connection whatever between the increased exposure required by the meter paper and the plate respectively when the latter is an orthochromatic one and the screen is interposed in each case. How delightfully simple it would make the work if only this were true.

We do not wish to suggest that there is not a great deal of reliable information in the book. There is. There was bound to be, seeing how successfully one of its authors has illustrated it with his camera. But there are several points upon which it could be made more accurate, and we trust that a new edition may be speedily required, and may be made the opportunity for careful revision.



ANCIENT BED OF THE ARDECHE

The Gorges of the Ardèche.

By G. E. Thompson.

The River Ardèche, dealt with in the following sketch of a very picturesque tour, is a tributary of the Rhone, into which it falls between Lyons and Avignon. As Mr. Thompson shows, it furnishes ample material for the photographer.

THE country of France abounds in natural curiosities. In parts there are great limestone plateaus, dry and arid, where there are great pot holes hundreds of feet in depth; here are grotesquely-shaped rocks and subterranean rivers. In the chalk cliffs of Les Eyzies there are caves where bones of extinct animals and the flint instruments of prehistoric man are found at the present day. The Auvergne is a land of extinct volcanoes. The picturesque town of Le Puy stands in a crater where you may see walls built of basaltic columns.

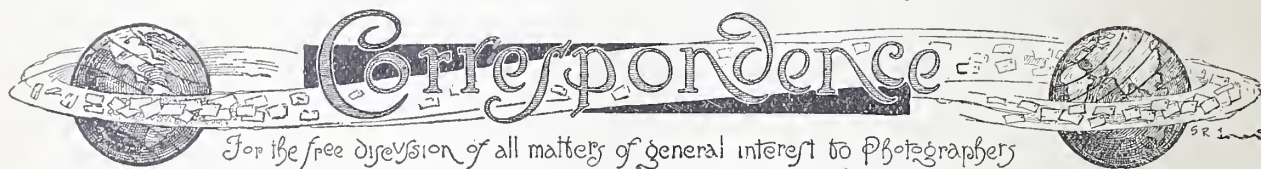
The canyons of France are only exceeded in grandeur by those of Colorado. Some years ago I descended the gorges of the Tarn, and last autumn, with a friend, I took a boat down the River Ardèche for nearly thirty miles, and it is of this river that I am about to write. One can get to Lyons from London in twenty-six hours, and thence by an easy journey of eight or nine hours, by rail down the Rhone, Vallon is reached—a village in the south part of the Cevennes. Here at the starting point for the voyage down the Ardèche stands one of the most marvellous freaks of nature in France. A great natural arch of limestone, 193ft. wide, spans the river.

The ancient bed of the Ardèche, curving to the left, is now a fertile tract where vines, chestnuts, and other fruit trees flourish. The limestone is much perforated with holes and

caves, and the force of the Ardèche floods are sometimes terrific. Gradually the river here had percolated the rock until it had widened the opening sufficiently, and then, passing through the arch it had made, it forsook its old bed for the shorter cut.

A small inn stands high up the rocks near the arch. Here the traveller sleeps and arranges for the boat. Before seven on a fine warm morning with two navigators and a plentiful supply of food we shot under the arch for our voyage of nine hours. The road beside the river ends at a village three miles below our starting point, after that we see no path or sign of man till we sight a lone house some fifteen miles down the river.

The photographs will give some idea of the scenery on our route. There are rapids, shingly beds, and deep pools, where, through the clear water, you may see the trout far below. The beautiful red and grey precipices of limestone tower up in places to 1,000ft. in height; in others, the rocks, clothed with bright green foliage, slope down to the water's edge. For lonely grandeur and quiet beauty the gorges of the Ardèche would ordinarily be hard to beat, but when a flood descends upon the mountains of the Cevennes, as it did ten days after our visit, the quiet river becomes a raging torrent dealing destruction throughout its course. The storms of last autumn were exceptional in fury, and our man wrote saying that the water rose 80ft.



The Editor is not responsible for the opinions of his correspondents

EXPOSURE BY FORMULA.

Sir,—I accept Mr. Watkins's correction. I now understand that it was the Wynne paper that was altered, being made faster in action. This matter is of no importance except for comparison.

In order to find the exposure by any meter, using this simply to test the light, we must have a formula which will give the exposure in all cases, and I may say here that the formulæ which I shall give are for stop $f/8$, it being, of course, easy to alter the resulting exposure to suit any other stops.

(1.) For the Watkins meter we are given the formula,

$$\text{Exposure} = \frac{A}{P} \text{ (using } f/8 \text{).}$$

(2.) The formula which gives all the Wynne exposures for $f/8$ is: $\text{Exposure} = A \div \frac{F^2}{64}$, which anyone who has that meter can test for himself.

In using this formula my practice is to calculate the value of $\frac{F^2}{64}$. This, for instance, for $F = 88$ is 120. I then mark

my changing box or dark slides, Exposure $\frac{A}{120}$ Wynne; or,

if using the Watkins meter, I should find P , which in this case is 192, and I should mark the changing box, Exposure

Watkins $\frac{A}{192}$.

If these two A values were found by exposing the two actinometers to the same light, the resulting exposures must be equal.

$$\begin{array}{l} \text{Hence} \quad \frac{A \text{ Wynne}}{120} = \frac{A \text{ Watkins}}{192} \\ \text{Or} \quad \frac{A \text{ Watkins}}{192} = \frac{120}{192} = \frac{5}{8} \end{array}$$

which was the proportion I mentioned.

There is another very simple meter, the Imperial, the formula for which is, $\text{Exposure} = \frac{5}{3} \times \frac{A}{H}$, or $A \div \frac{3H}{5}$

This also refers to stop $f/8$.

I think that those who have not as yet adopted the formula system would find it far more easily worked than the figures on the meter, especially as, for lack of space, many speed values have to be omitted.

Yours, etc.,

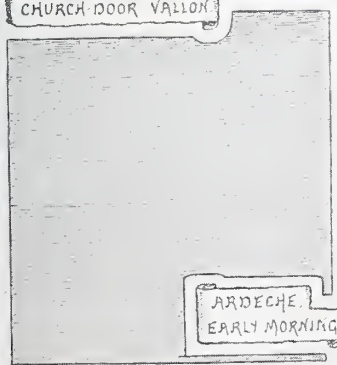
CLIFFORD E. F. NASH,



CHURCH DOOR VALLEY



NATURAL ARCH.



ARDECHE.
EARLY MORNING



DOWN RIVER



PRECIPICES ON THE ARDECHE

The Gorges of the Ardeche.

THE FATHERS OF PHOTOGRAPHY.

Particulars of these interesting photographic memorials of some of the fathers of photography will be found on page 281 this week.



BUST OF POITEVIN AT ST. CALAIS.

BIRTHPLACE OF DAGUERRE. CORNEILLES-EN-PARISIS.

STATUE OF NICEPHORE NIEPCE AT CHALON-SUR-SAONE.

DAGUERRE'S TOMB, BRY-SUR-MARNE.

TOMB OF NICEPHORE NIEPCE AND HIS WIFE AT GRAS.

NICEPHORE NIEPCE'S HOUSE AT GRAS, NEAR CHALON-SUR-SAONE
WHEN HIS PHOTOGRAPHIC DISCOVERIES OF 1822 WERE MADE.

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PUBLISHING DATE.—PHOTOGRAPHY AND Focus is on sale throughout the United Kingdom every Tuesday morning.

SUBSCRIPTION.—PHOTOGRAPHY AND Focus will be forwarded regularly at the following rates
GREAT BRITAIN. ABROAD.

Twelve Months .. 6 6	Twelve Months .. 10 10
Six Months 3 3	Six Months 5 5
Three Months ... 1 8	Three Months ... 2 9
Single Copy 1½	Single Copy 2½

REMITTANCES.—Postal Orders, Cheques, etc., should be crossed and made payable to Iliffe and Sons Limited.

ADVERTISEMENTS.—All communications on advertisement matters should be addressed—The Advertisement Manager, PHOTOGRAPHY AND Focus, 20, Tudor Street, London, E.C. All copy for displayed advertisements for the issue of any particular week must reach Tudor Street by the first post on Monday morning in the week previous.

PREPAID ADVERTISEMENTS.

SALE AND EXCHANGE (for Amateurs only).—1d. per word, minimum 9d.

PROFESSIONAL AND TRADE.—Three words 2d., minimum 1/.

All advertisements to be inserted on these terms must be accompanied with remittance. To ensure insertion, letters should be posted in time to reach the offices, 20, Tudor Street, E.C., not later than first post on Wednesday.

BOX NUMBERS.—For the convenience of advertisers, letters may be addressed to numbers at the office of the paper. When this is desired, 2d. will be charged for registration, and three stamped and addressed envelopes must be sent for forwarding replies. Only the number will appear in the advertisement. Replies should be addressed, "No. 000, c/o PHOTOGRAPHY AND Focus, 20, Tudor Street, London, E.C."

DEPOSIT SYSTEM.—Persons who hesitate to send money to unknown persons may deal in perfect safety by availing themselves of our Deposit System. If the money be deposited with PHOTOGRAPHY AND Focus both parties are advised of this receipt, and upon intimation of the arrival and acceptance of the goods, the money is forwarded, less a charge of 1/- for registration. The time allowed for a decision after receipt of the goods is three days. For all transactions exceeding £10 in value, a deposit fee of 2s. 6d. is charged. Cheques and money orders should be made payable to the Proprietors, Messrs. Iliffe & Sons Limited, and addressed to them at Coventry.

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EDITORIAL NOTICES.

ADDRESS.—All communications for the Editor should be addressed: The Editor, PHOTOGRAPHY AND Focus, 20, Tudor Street, London, E.C.

TO CONTRIBUTORS.—The Editor will be glad to consider original up-to-date manuscripts on photographic subjects. All contributions must be typewritten, or in very legible handwriting, on one side of the paper only, and should bear the name and address of the sender. Letters or communications arising out of matters already appearing in the paper are not paid for. The Editor disclaims legal responsibility for the safety of matter submitted to him, but he will endeavour to return rejected manuscripts, etc., when a stamped addressed envelope is enclosed for that purpose. No notice whatever can be paid to communications without the name and address of the sender, not necessarily for publication.

PRINTS FOR CRITICISM.—Readers sending prints for criticism or advice are notified that in all cases it is understood that by so doing permission is given for their reproduction, without fee, in PHOTOGRAPHY AND Focus.

PRINTS FOR REPRODUCTION.—Reproduction fees are only paid by arrangement beforehand. The sending of a print, without any condition stated, will be taken as permission to reproduce it without fee. The Editor will be glad to consider for publication, with or without letterpress, photographs of special interest, on terms to be arranged.

PAYMENTS.—Articles and illustrations are paid for on acceptance.

INTERVIEWS.—The Editor will be at 20, Tudor Street, on Wednesdays, between the hours of 9.30 and 11.30 a.m., but can only be seen at other times by appointment.



ANLEITUNG ZUR PHOTOGRAPHIE, the comprehensive textbook by Pizzighelli, has just reached its thirteenth edition. It is published by Knapp, of Halle a. S., price 4 marks 50.

PRINTS FROM AUTOCHROMES. Mr. W. Rayner, of Arundel, Uxbridge, London, W., has shown us some very successful reproductions on paper in three colour carbon from Autochrome originals. Mr. Rayner is prepared to supply them commercially at very reasonable rates, and also undertakes three-colour reproduction work generally.

WHEN SHOWING AUTOCHROME PICTURES by artificial light, it is well-known that except with the electric arc, and to a less extent with acetylene, the illuminants are disproportionately rich in red and yellow rays, and much of the accuracy of the colour record is lost. To remedy this, Dr. Power, writing in "Camera Craft," says he uses a light blue screen, made by fixing out and washing an unexposed plate, and then after drying it, immersing it in a weak solution of methylene blue.

Books for . . . Photographers.

Science and Practice of Photography.

By CHAPMAN JONES, F.I.C., F.C.A., F.R.P.S.
Price 5/- net. Post free 5/4.

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By SIR WILLIAM ARNEY, K.C.B.
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Practical Orthochromatic Photography.

By ARTHUR PAYNE, F.C.S.
Price 1/- net. Post free 1/2.

Successful Negative Making.

(Illustrated.) By T. THORNE BAKER, F.C.S., F.R.P.S.
Price 6d. net. Post free 7d.

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(Illustrated.) By C. WINTHORPE SOMERVILLE, F.R.P.S.
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Photography Made Easy.

(Illustrated.) By QUI-VIVE.
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(Illustrated.) By JOHN A. HODGES, F.R.P.S.
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A WESTERN COUNTIES PHOTOGRAPHIC EXHIBITION is to be held in Plymouth, November 4th to 21st. The secretary is A. D. Breeze, Great Western Chambers, Plymouth.

COMMERCIAL ENTERPRISE. "The Sketch" last week reproduced a photograph of a troupe of performing acrobats who give an entertainment outside the studio of a professional photographer in Tokio to attract attention to his establishment.

A BUSCH ALBUM. The Emil Busch Optical Co. has sent out to dealers a very neat and attractive little album of photographs taken with Busch lenses. By giving it a prominent position on the counter, many customers will learn what excellent work can be done with the company's instruments.

THE PHONOGRAPH IN THE DARKROOM. M. Gimpel, in a paper he read before the French Photographic Society, said that he used a phonograph in his darkroom. The instrument counted seconds, and so enabled him to time the development of Autochrome plates. As a parallel to the steam hammer that was used to crack nuts, this would be hard to beat.

A TREATISE ON RETOUCHING, both of negatives and prints, which deals with its subject in a concise and practical manner, is that of Carl von Zamboni. A fresh edition has just been published by Wilhelm Knapp of Halle a. S. The title of the book is "Anleitung zur Positiv und Negativ Retouche." Its price is 2 marks 40. For anyone who can read German it is a good guide.

EASTMAN PLATE COMPETITION. The first section of this competition closes August 20th, the second and third sections on September 21st and October 20th respectively. Cash prizes to the value of £240 are offered by Kodak, Ltd., and there are special classes for those who have never won a prize, and for negatives developed in the Eastman plate tank. Full particulars can be obtained from any dealer, or from Kodak, Ltd., 57-61, Clerkenwell Road, London, E.C., or its branches.

POSTCARDS WITH ROUND CORNERS. The Birmingham Photographic Co., of Criterion Works, Stechford, near Birmingham, is now issuing Criterion P.O.P. postcards in Court size with rounded corners. These are supplied in all classes of papers and cards, and many workers no doubt will prefer the rounded corners to the sharp ones. The corners, we may point out, are very smoothly rounded off. There are so many photographers who appreciate the advantages of printing direct on to card instead of thin paper, that the announcement that the Birmingham Photographic Co. is prepared to supply quarter-plate, half-plate, or any other size in postcard thickness will be of interest.

The "Klito" Hand Camera

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The "Klito" Hand Camera is the most popular magazine plate camera in the world.

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Let us send you (free) an illustrated catalogue of the cameras we make and your dealer sells. A postcard will do to make the application on.

HOUGHTONS

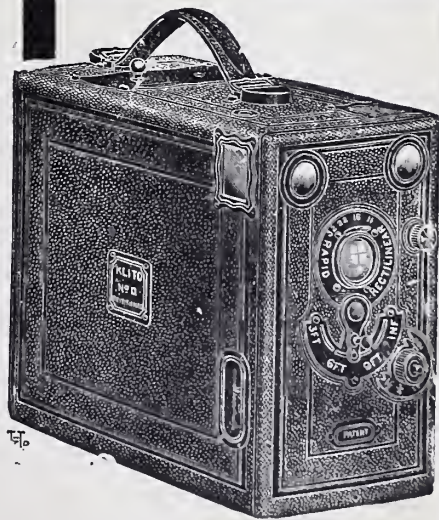
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SYMMETRICAL LENS F/8 . . . 25/-



QUERIES AND REPLIES



REGULATIONS.—(1) Envelopes must be marked "Query," and the "Enquiry Coupon" found elsewhere must be enclosed. (2) The full name and address in addition to a *nom-de-plume* must be given. (3) Only one question on one subject is allowed in each letter. (4) Prints may be sent for criticism, but a separate coupon must be sent with each print, and a stamped addressed envelope (not loose stamps) for their return.

Queries are dealt with in strict rotation in the order received. Only "Urgent Apparatus" queries will be dealt with by post, for which purpose a stamped envelope must be enclosed.

THE WEEK'S QUERY.

Recovery of Silver from Hypo Baths.—Can you give me a good working formula for the recovery of silver from hypo baths?—A. W. HANKINSON.

The hypo baths should be put aside until a sufficient quantity of solution has accumulated to be worth the trouble of treating, and should then have added to them a little of the solution of sodium sulphide, such as is used for toning bromide prints by the Blake-Smith process. The strength of the solution is not very important; but for convenience it should be pretty strong, say ten per cent. or more. This will cause a copious black precipitate of silver sulphide. This should be allowed to settle and more sulphide added. If there is a fresh precipitate more sulphide is required; if none, then all the silver has gone down. An excess of sulphide does no harm beyond being wasted. Liver of sulphur may be used instead of the crystallised sodium sulphide if obtainable. It is just as effective and cheaper. The liquid is carefully decanted from the precipitate, which is allowed to dry and may be sold to the refiner.

If it is preferred the silver may be recovered from the sulphide at home. The dried sulphide is put on an iron shovel, heated over a fire and then lit. This burns off free sulphur and leaves the sulphide as a bright shiny black mass. It is powdered and mixed with one-fifteenth its weight of powdered aluminium. The mixture is put into a fireclay crucible, filling it about two-thirds full and shaking it well down, and this is heated to redness in an ordinary fire. On allowing it to get cold the metallic silver will be found in a lump at the bottom of the crucible.

REPLIES IN BRIEF.

SNAPSHOT (Cheltenham).—It should be used after the negative has been fixed and washed and dried.

TINKER (Frome).—The London address of Messrs. Clement and Gilmer is 1, 2, and 3, Holborn Circus, London, E.C.

T. C. HUNTER (Belfast).—We know of no formula that does not bleach the prints a great deal. They must be overprinted to allow for it.

S. GROVE (Pulborough).—We have sent your letter on, and are glad to hear that the paper has helped you. We hope it will continue to do so.

W. WALTON (Birmingham).—Mercuric chloride and mercury bichloride are the same substance. Mercuric bichloride is an improper term to use.

SEASIDE (Ayr).—We should think it would be eligible; but the rules are construed in a commonsense light, and the eligibility of each picture is taken on its merits.

P.B. (Hulme).—The shutter would be set to T, and then the bulb or release pressed to open it. A second pressure closes it, and the scale is then set to the speed desired.

F. E. MURRELL (South Tottenham).—From your description of your enquiry it certainly could not come under the head of "Urgent Apparatus," which includes only enquiries relating to apparatus had on approval for a limited time. Rule 3 also seems to be overlooked entirely.

H.R.M. (Dicker).—Messrs. Butcher and Sons, Ltd., Camera House, Farringdon Avenue, London, E.C., supply outfits of type for the purpose, which are very suitable; or the same thing can be done by lettering neatly on the film with liquid Indian ink and a mapping pen, but it has to be written backwards, and unless done very neatly it does not look at all well.

Special Subject Competition. Awards for July.

THE entries for this particular competition were more numerous than those for any of its predecessors, so that the popularity of its subject is beyond question.

The general average of merit also was very high, and quite fifty per cent. of the entries survived the preliminary selection. This is quite unusual, as from eighty to ninety per cent. as a rule are excluded at the first round. In spite of this, however, there was no entry of very outstanding merit which could be said to be easily first.

Awards.

The first award, *Photography* silver plaque, was won by

ERNEST (Southall).—The usual price is sixpence an ounce. Your chemist has treated you very fairly.

FLY (Sutton).—Carefully clean the print with bread, and then gently rub over it a tuft of cotton wool moistened with benzine.

W. SCRIVEN (Liverpool).—The honorary secretary of the Architectural Detail Postal Club is Mr. W. Maitland, of 54, Parliament Street, Stockton-on-Tees, who will no doubt be pleased to give you full particulars.

WATERLOO (Junction Road).—If by fast speeds you mean shorter exposures than one-fiftieth of a second, then a focal-plane shutter would be best. If you are not likely to want it for very high speed work, the Koilos.

STOPPED SHORT (Bristol).—Your negative when it reached us was suffering from pulverisation. How often must we point out that a glass negative sent through the post needs more protection than a couple of thin cards.

JIM (Lechlade).—The lens is not on the British market at all, but has a large sale in Germany. It would be best to send it to the makers; it is hardly the sort of thing to attempt to do at home, and may easily result in injury.

J. M. LAYCOCK (Bradford).—The print will be disqualified and therefore will be eligible in another competition. The coupon must accompany it, as you would well understand if you saw the immense pile of prints with which we have to deal.

CLOTHESHORSE (Burley).—You certainly ought to get fully exposed snapshots, provided the subjects are open ones; but with heavy foreground shadows such a lens and shutter would require a very strong light. We cannot carry out the request in your P.S.

CRITICISM.—We have had quite a number of prints sent us for criticism without coupons or stamped addressed envelopes. Will readers note that we cannot deal with such requests, nor can we send criticisms when the envelopes and coupons reach us separately?

ISO (Swansea).—There is a slight advantage in using an orthochromatic plate even without a screen, but it is not great. It is not practicable to use an orthochromatic screen on a non-orthochromatic plate, as it makes the exposures much too long. The screen mentioned would require from five hundred to a thousand times as long an exposure as without it if used on a non-orthochromatic plate.

SLOW SPEED (Belper).—It is generally agreed that for comparatively slow exposures a diaphragm shutter is to be preferred to one of the focal plane pattern; but hardly for the reason you assign, as in most patterns the opening can be much greater than 1½ inches. But the weight of the moving parts is much greater with a focal plane camera, and therefore the risk of movement is greater. But anyone accustomed to such a shutter would have no trouble with 1-15th second.

MUREX (Poulton-le-Fylde).—If you only require the camera for that purpose you will do well to get a square bellows double extension instrument, such a camera as Watson's Premier. Messrs. Zeiss make a special lens for work of this kind; and this would be the best to use, but perfectly good work can be done with an ordinary R.R. and a landscape camera of long extension.

J. WODEHOUSE (Cyprus).—(2.) We cannot draw distinctions between the two pieces of apparatus; both are very good. (3.) We prefer the Watkins. (4.) We never heard of the stuff you name, and, in any event, we do not understand why anything should be applied to a lens, good or bad. Wipe it gently with a clean soft handkerchief if it needs wiping, and if there is anything else that needs doing send it to the maker.

Fred J. Spinks, of Duckworth Grove, Bradford, with a print of "Wild Roses."

The second prize, *Photography* bronze plaque, was won by Basil D. Haines, of 402, Wells Road, Knowle, near Bristol.

The third prize, *Photography* bronze medal, was awarded to Edward Reynolds, of 43, Jedburgh Street, Clapham Common, London, S.W., for "Water Lilies."

Certificates were awarded to E. Fountain, of 2, Minerva Avenue, Dover, for "Wild Parsnip," and to George Gilbert, 203, Belmont Road, Bolton, Lancs., for "Spanish Iris."

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HOLIDAY INFORMATION.

PENRITH.

In reply to E. G. Huish.

The neighbourhood of Penrith abounds in old halls, castles, and antiquarian remains, while its mountain and lake scenery constitute it a delightful centre for the photographer. Near the station are the ruins of Penrith Castle. St. Andrew's Church, rebuilt in 1721, has a square tower of very great antiquity. In the churchyard is "The Giant's Grave"—two pillars, one at the head and the other at the foot of a grave, fifteen feet apart. A local legend says Sir Hugh Caesarius is buried here.

The Beacon should be visited. This is a wooded eminence north of the town, with a fine view. Eamont Bridge (1 mile) has Druidical remains. Brougham Castle ruins (1½ miles) has near by the famous "Countess Pillar." Yanwath Hall (2 miles) is a fortified manor house of the fourteenth century. Coaches and motors run several times a day to Pooley Bridge (5 miles), at the foot of Ulleswater Lake. Twelve miles from Penrith is Haweswater with splendid mountain scenery. The lake is three miles long, and permission for boating or fishing must be obtained from the Lowther Estate office. Aira Force (12½ miles) is a beautiful waterfall eighty feet high. It is situated near Gowbarrow Fell, recently purchased by the National Trust. Dacre Castle (5 miles) is an ancient stronghold, long the seat of the Barons Dacre, with an old church near by. The scenery at Nunnery Walks (10 miles) is very picturesque.

The best hotels in Penrith are the George, Crown, Station, and Agricultural. Coaches for Ulleswater leave the George and Crown three or four times a day during the season. Mr. Banks Swinburn, of Devonshire Street, and J. Cowper, Ltd., of Corney Square and 50, King Street, supply photographic apparatus and material and provide dark rooms.

CHESTERFIELD.

I expect to be going to Chesterfield very shortly, and should be glad to know of photographic work that can be done there.—D. MCGOWAN.

Taking the town of Chesterfield as a centre the photographer will find many places of historic and other interest within easy reach. The Parish Church with its curious "crooked steeple" is as beautiful and interesting inside as its exterior is quaint. The "poppy-head" carvings which terminate each pew, and the richly carved pews allotted to members of the Corporation, provide material for some interesting work.

About two miles away is "Revolution House," where in 1688 the plot was laid for the downfall of King James. In another direction, and six miles away, lies Hardwick Hall, a stately edifice, which both for itself and its surroundings must appeal to every user of a camera. In a slightly

different direction, and again about six miles away, is the interesting little village of Bolsover, with its church, and a magnificent castle towering above the crest of the lofty eminence on which it is built, and surrounded by beautiful woodland. Adjoining it are the picturesque ruins of the old castle, with its remarkable facade beautifully overgrown with ivy, and its long stretch of terrace.

Other places of interest, and also within easy access, are the fine old ruins of Wingfield Manor (twenty minutes by train), Chatsworth House, standing in its beautiful and extensive park (eight miles distant), Cliff College, Calver (the Wesleyan Mission Training College), Stoney Middleton with its huge boulders of rock and precipice, Eyam (the plague-stricken village of 1666) with its historic church and fine Runic Cross, considered to be the finest specimen in England, Cucklett Church, Monpessons' Well, etc. Tideswell, the quaint old-world town with its magnificent church, called "The Cathedral of the Peak," containing some fine specimens of modern wood carving. From Tideswell the pleasure seeker can work back through the valleys of Miller's Dale and Monsal Dale (unparalleled for their beauty), Bakewell, Haddon, Darley, and Matlock, through the lovely Derwent Valley, all along by the river to Ambergate.

Chesterfield is amply catered for as regards photographic materials. An excellent stock of all requisites are obtainable from Mr. I. R. D. Barfoot (West Bars), Mr. G. Sampson (Market Place), Mr. I. H. Toplis (Soresby Street), at all of which places dark-rooms are available, and from Mr. I. Dent, New Square. Good accommodation is provided at the Station Hotel and Hotel Portland.

PORTMADOC & SNOWDONIA.

Particulars of Portmadoc and Snowdonia would be much esteemed by "Lancastrian."

Portmadoc is the centre of a district of high mountains, waterfalls, rugged cliffs, picturesque lakes and ravines. The following list gives a few of the attractions in the immediate neighbourhood of Portmadoc, but there are many others if the surrounding country is taken into consideration.

The toy railway, the pioneer of narrow gauge lines, runs for nearly a mile over an embankment, and well deserves attention and the expenditure of a few pence. The rails are only 1ft. 11in. apart. Then there is the famous pass of Aberglaslyn, close to which is the grave of Gelert, near the village of Beddgelert. St. Michael's Church, Portmadoc, is a very ancient structure. In the churchyard is a very old inscribed stone bearing the Christian symbol. It is attributed to the seventh century.

The fine old castles of Harlech and of Criccieth are both in a fair state of preservation. Harlech was supposed to be founded by Edward I. Their position and surroundings, however, give them their charm and interest. Shell Island, Cwmtychan Lake, the Old

Roman Steps (2,000 in number) are also worth a visit, as are the Black Rock and the Caves. These may easily be photographed at low tide.

Those who indulge in other amusements besides photography will find their desires are well catered for at Portmadoc. There is good fresh water and sea fishing, trout, salmon, bass, mullet, skate, etc. Bathing is very safe and pleasant, and there is good boating on the estuary and at Borth. There are golf links within a couple of miles, and cricket matches between visitors and residents are arranged during the summer months. The district is also very interesting from an antiquarian and botanical point of view.

Portmadoc is well provided with hotels and apartments, and there is a darkroom at Mr. A. E. Humphreys, chemist, 82, High Street, where photographic apparatus and material can be obtained, and where Mr. Ivor Jones will be glad to do what he can to assist the readers of *Photography and Focus* who may call.

FOWEY.

Would you oblige by giving me what photographic information you have available concerning Fowey?—T. C. SCOTT.

About six hours from London (Paddington), at the mouth of the river Fowey, stands the ancient town of Fowey. Some of its old places, things, and ways still remain; but it has been somewhat modernised. The quaint narrow streets and alleyways—the latter still cobbled—give it, so it is said, the air of some foreign town. This effect is heightened by the chatter of foreign sailors, for Fowey is essentially a sailor's place.


The harbour is a beautiful natural enclosure, and the sea front is all cliff, the rugged coast being dotted with funnel-shaped coves. Bold masses of rock, great clumps of seaweed, reflected in clear smooth water, or smothered in driving spray, the sea in all its moods are the subjects which confront the photographer at Fowey.

Quaint fishing villages are within reach by steamer or carriage. Polperro, Looe, and Mevagissey are places attractive alike to painter and to photographer. The fishing boats and fishing quay provide everchanging pictures.

The river up above the loading jetties whence the china clay is exported, is very beautiful, a broad expanse of water between wooded slopes. There are creeks to explore, Old Hill Creek, Penpole, and Golant. Higher up the river divides—to the left Lostwithiel, and to the right Lerryn, both beautiful streams.

Lodgings in Fowey are not always easy to obtain, and are varied in price and in convenience. Twenty-five to thirty shillings a week for two rooms and attendance is about the average. The leading makes of plates are stocked in the town, and darkrooms are available at the establishments of Mr. G. Finlay, chemist, Fore Street, and Messrs. F. Ketto and Sons, photographers, Esplanade, where photographic supplies can be obtained.

WELLINGTON CANVAS Bromide



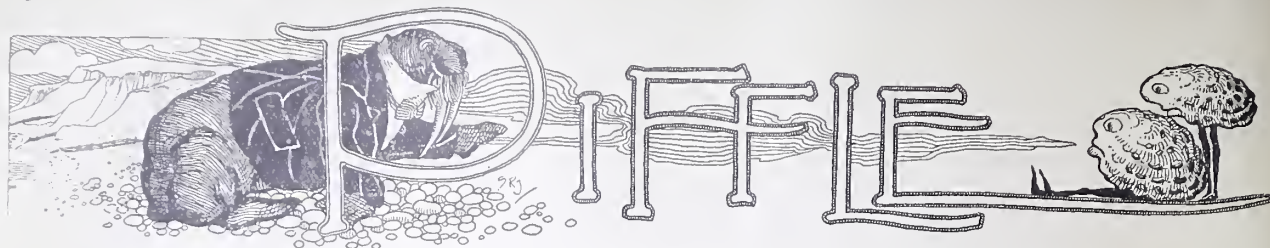
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"The time has come, the Walrus said, to talk of many things."

WHEN it was decided that the little town of Pigstoke should be in the fashion and hold a pageant, Knubbles saw his opportunity, and determined to grasp it. Knubbles was the best photographer in Pigstoke. He was the only one. Hence his pre-eminence.

* * *

Knubbles's second cousin on his wife's side was distantly related to the sister-in-law of the aunt of the chairman of the Pigstoke Rural District Council, who was himself the Pigstoke Pageant Committee, with power to add to his number, and Knubbles resolved to use the influence thus obtained for all it was worth in securing facilities for producing his photographs. As he had never ventured on anything more nearly approaching an instantaneous exposure than ten seconds, he decided not to execute his work amidst the moving pomp of the pageant itself, but to secure at the final dress rehearsal some groups of what he called the principal tablawks. He even went so far in his self-renunciation as to feel reconciled to the fact that he himself could not appear in any of the groups. The pictures would thereby be rendered historically incomplete, inasmuch as he was himself cast to represent Henry VIII., a pre-historic mammoth, a corpse in the Wars of the Roses, the baited bull in the Old English Sports, and a riotous mob in Elizabethan London. But in spite of all this, he resolved that no hand but his should manipulate his apparatus.

* * *

He approached his task with a sublime confidence born of the recent acquisition of a new half-plate outfit. That is to say, it was new to him, although it had really grown old with service in the hands of a peripatetic tintyper. Even Knubbles, with all his inexperience, detected serious defects in the apparatus, but with the aid of his son and a pennyworth of tinctacks he had imparted to it a semblance of substantiality that was almost satisfactory. With a couple of blankets draped over it one might almost have called it light-tight in parts. Knubbles's faith in its capabilities was quite pathetic.

* * *

So it came to pass that Knubbles began to see visions and to dream dreams. He figured to himself a resplendent volume of photographs with its cover emblazoned with the Pigstoke arms—a pigsty rampant—and inscribed in letters of gold, "Some Pictures of the Grand Historic Pigstoke Pageant, by Oliver X. Knubbles." He pictured editors of illustrated papers ranged before him on bended knee and tendering weighty bags of gold as reproduction fees for the Pigstoke prints. The sales of picture postcards mounted to countless millions—in his mind.

* * *

With all his courage Knubbles found himself tremulous with excitement as he posed his first group on the morning of the final rehearsal in the Pageant Meadow at the back of the "Goat and Bumblebee." His troubles began early. While he was disentangling Britannia's trident from Lady Godiva's back hair Guy Fawkes knocked down the camera and eight highly responsible tinctacks fell out. A barefooted ancient Briton found two of the tinctacks with his great toe, but the others were lost in the grass. To make matters worse, a most regrettable dispute as to the place of honour in the group ensued between Boadicea and Queen Elizabeth, and a good deal of unpageantry language was used. Queen Bess remarked that from what she knew of history Boadicea had a figure, to which Boadicea retorted that it was an established fact that the so-called Virgin Queen was nothing better than a grumpatious cat. When the dispute was finally adjusted, Boadicea found further cause of complaint, inasmuch as the milkman's name had not been painted out on her chariot; while Lady Godiva flatly declined to accept

an available ass as a substitute for her promised steed, which was engaged for the time being in drawing a hay-rake in the next parish. To add to his troubles Knubbles found that the cap had blown off the lens while the slide was open, and that his over-anxious son had opened two other slides to make sure that pa had not forgotten to put the plates in.

* * *

Another group was practically ruined by the absence of the Roman army, who was in the taproom drinking four ale out of his helmet, and flatly refused to appear for less than two shillings and another helmetful.

* * *

It is useless longer to conceal the sad truth that of all the photographs Knubbles took there was only a solitary one which came out well, and that was the impressive tableaux of St. George slaying the Dragon. The beams of light that had found their way in through the edges of the dark slide had practically spared the dragon and obliterated only the head of St. George, while they had to a large extent wiped out the advertisements of Muggins and Co.'s Entire on the "Goat and Bumblebee" in the background. The carping critic might have taken exception to the inclusion in the group of the chairman of the committee in a top hat and frock coat, and a certain amount of realism was sacrificed to the prejudices of the dragon, who insisted on discarding his reptilian head-piece so that his own features could be seen, to wit, the features of W. Smith, ploughman. As W. S. argued with some force, how would anybody know it was 'im as were the draggin 'if so be as 'ow they couldn't see his face and whiskers.

* * *

There is no longer a photographer in Pigstoke. Knubbles has abandoned the art. He realised that he was by no means up to date. During the progress of the pageant he snatched a brief period of leisure between his representations of the baited bull and the lonely corpse of Bosworth Field, and during that interval he came upon a photographer seated in a comfortable chair behind a camera that filled the simple soul of Knubbles with awe. Every now and then the photographer would pause in the puffing of a huge cigar, squint into a sort of portmanteau on top of the camera, and touch a trigger. There resulted a mighty rattle like the running out of a ship's cable, followed by a bang like a dynamite factory going off. Then he would say with a chuckle, "That's another one, and by the living hokey they beat creation. Fourteen pageants I've done up to now, and if this isn't the rummest thing I ever struck may I be jiggered. That comic bull was worth a dozen plates any day. The chap that played that is a real artist, and no kid."

* * *

But Knubbles did not agree with him. He felt far happier as the corpse. At any rate he washed his hands of photography for ever.

THE WALRUS.

SUBSCRIPTIONS.

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PHOTOGRAPHY

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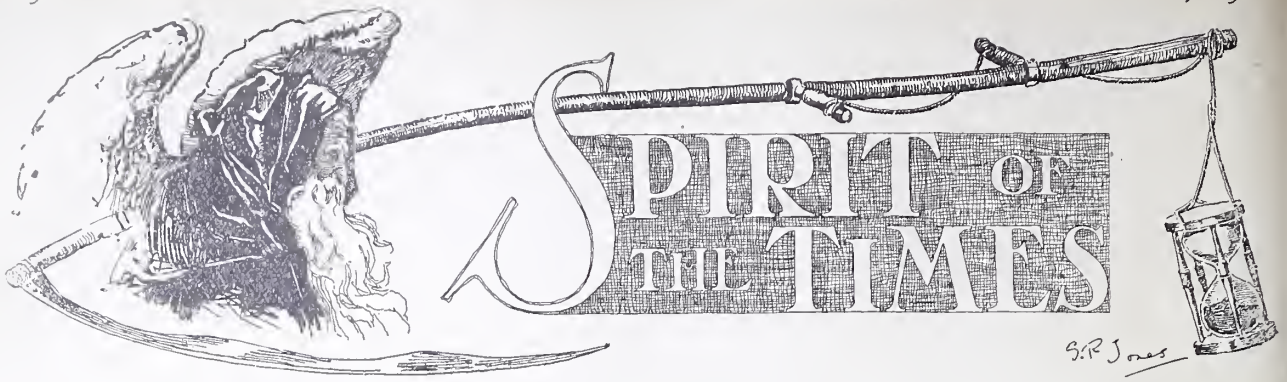
AUGUST 18TH, 1908. TUESDAY. No. 1,032. VOL. XXVI.



WILD ROSES.

BY FRED J. SPINKS

Awarded the First Prize in the Special Subject Competition, July, 1908.



A Remarkable Series.

This phrase does bare justice to the seven examples of unorthodox portraiture which we reproduce this week in illustration of Mr. S. J. Tayler's article on the subject. We have been compelled to separate the photographs more than we like, but we hope that every reader will compare them one with another, as it is only by doing so that the wonderful variations played upon one face can be appreciated to the full. Of course, a great deal depends on the versatility of the model, and it is not every amateur photographer who has a brother who can make up at a moment's notice and with equal success as a saintly nun and a ruffianly pirate; but one has to be careful not to overdo the tribute to the model and so to lose sight of the part played by the photographer himself. Mr. Tayler tells exactly how each of the portraits was arranged, shows how very simple were the means employed, and also points out the influence of the lighting and of the lens on the final result. We should like to draw the attention of those of our readers who feel attracted by this work to the complete absence of accessory details. The effects have been got by the model and by the make-up; each is a portrait, and in each the interest is concentrated on the face without the introduction of a single disturbing element. It seems that in unorthodox portraiture we have a field of amateur photography which up to the present has been very little worked.

Photography under the Sea.

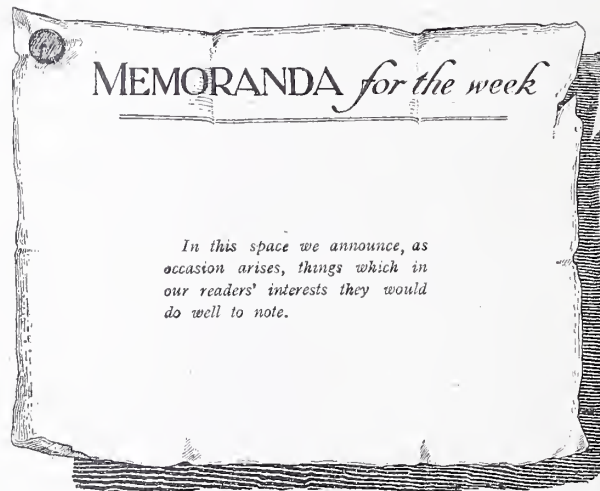
It is now some seven or eight years since the possibilities of photography under water were first put before British readers by a special contribution to *Photography* by M. Louis Boutan, the French zoologist who has specialised in this work. Little has been heard of the subject since, the difficulties of submarine photography being very great. M. Etienne Peau, another Frenchman, has recently been very successful, using flashlight for the purpose, and so getting over the difficulty of under-water illumination. In a recent article in the "Daily Mail" Mr. Thorne Baker tells us that if ever the submarine becomes an ordinary means of travel

one need not necessarily leave his camera behind when going on a sea voyage, and the remark conjures up a mental picture of the travel of the future, which is full of wondrous possibilities. All the same, we doubt how far a request to stop the submarine in order that the passengers might get out and take a few snap shots on the sea bottom would be granted by the captain, and even if it were, there is a great deal to be done before the subaqueous hand camera becomes an accomplished fact.

The illumination difficulty can be got over, as we have mentioned, by flashlight—not by ordinary flash powders, which would be difficult, if not impossible, to use under water, but by burning aluminium or magnesium in oxygen gas, much as it is done in the Platinotype Co.'s lamp. A flash powder could be made to contain its own supply of oxygen, and so to burn under water, but the other method would probably answer better, and certainly seems more promising. One difficulty that must not be overlooked lies in the lens, which would have to be specially corrected if it were to be used with its front surface in contact with water. The whole subject, as Mr. Thorne Baker points out, is at present in its infancy, but is a fascinating one for anybody with time, money, and photographic interest to take up.

Our Lantern Slide Competition.

This week on page 315 will be found full particulars of our annual lantern slide competition. It will be carried out on lines closely similar to those which were followed in the *Photography* competition last year, which were found to result in a much larger entry and in a much higher standard of work than have been the case on any previous occasion. That is to say, "sets" of slides are not required; each separate slide stands on its own footing, just as each separate print does in our ordinary competitions; each slide will be considered by itself, and each award will go to a single slide. Moreover, all slides which are retained for circulation, if they do not take an award, will be purchased by us for the purpose at the rate of half a crown



each. We do not suggest that this represents the value of the slide as a commercial article, but we know that those whose slides are retained, as they are in other competitions without any recognition at all, are deterred from sending in work which they value on that account. The immediate result of this regulation last year was a great improvement in the quality of the competing slides, and this we attribute very largely to this particular rule. Will competitors note that Monday, October 19th, is the closing date?

"INCIDENTS."

A denizen, dusky, of Fiji
Tried to snap-shot a galloping giji;
He got too near its tail,
Now his outfit's for sale;
No more will he handle a squiji.

A worker in bromide at Bicester,
A print made, of somebody's sicester;
But this was not shown her;
The sepia toner
Adorned her nose end with a blicester.

From a rock, a bold man of Torquay
Made attempts at a turbulent suay;
The exposure he gave
Was too long for a wave;
That's why he was absent from tuay.

A lethargic snap-shotter of Pesth
Remarked, "When the button I've presth,
"I find it a bore
"To do anything more,
"So I let someone else do the resth."

British Photographic Goods in South Africa.

According to an article in "The British South African Export Gazette," seventy per cent. of South African importations of photographic material is of British manufacture, twenty-one per cent. is United States, and eight per cent. German. There are a hundred firms in South Africa which make a speciality of im-

porting photographic goods, two hundred and fifty professional photographers, and last year the imported photographic materials had a value of over £37,000. Quaintly enough, our contemporary attributes the large call for photographic materials to the "clear atmosphere and strong light," a mistake very common amongst the uninitiated. Actually, of course, there is no connection whatever between clearness of air and amateur photographers' activity. The British climate is one of the least clear in Europe, the Spanish is the exact opposite; yet in no other country in the world does amateur photography flourish to the extent it does in these isles, while in Spain it hardly exists.

A Card up their Sleeve.

From the very first, when, alone of photographic magazines, we were dealing with the Autochrome plate and its manipulation, we expressed the hope that there would be competition in the colour plate business; and that the Autochrome would not be without rivals to whom it might set the pace. Such a rival our contemporaries alleged to have discovered in the "Warner Pourie" modification of the Joly method; and, allowing their jealousy of *Photography* to get the better of their discretion, some of them exalted that somewhat coy process in a manner which excited a good deal of ridicule. All that is ancient history now, although we are reminded of it, as our Antipodean contemporaries come to hand, quoting in all good faith the statements of which time has shown the absurdity. But in the meantime, none of the rivals make their appearance; and now comes the information from France that the Lumière firm has another colour plate, this time a regular grain one, which it is prepared to bring out to meet competition, should such competition arise. The "Diachrome" plate it is to be called, we are told; and its merit, as compared with the Autochrome, seems to be cheapness of production, and extreme transparency of the screen coating. We make these statements with all reserve; but there seems little reason to doubt that MM. Lumière have another card of some kind up their sleeve. Will no other colour plate manufacturer make them produce it?



The Week's Meetings.

MONDAY, AUGUST 17TH.

Bowes Park & District Photographic Society. Affiliation Lantern Slides.
Walthamstow P.S. Discussion and Print Criticism.

WEDNESDAY, AUGUST 19TH.

Everton C.C. "Negative, Print, and Mounting Criticism."

THURSDAY, AUGUST 20TH

Barrow-in-Furness N.F.C. Furness Abbey.

SATURDAY, AUGUST 22ND

Preston C.C. Leyland.
Bowes Park & D.P.S. Loughton to Cbigwell.
Blackpool & Fylde P.S. Preesall and District.
Dennistoun A.P.A. Carnunnock.

SATURDAY, AUGUST 22ND (continued).

Hull P.S. Swine.
South Suburban P.S. Godalming.
Attercliffe P.S. Beauchief Abbey.
Leeds C.C. Scarborough.
Cripplegate P.S. Perivale Church via Hanwell and Greenford.
Wallasey A.P.S. Heswell.
Blackburn & D.C.C. Worston and Downham.
Todmorden P.S. Hollingworth.
Barrow-in-Furness Naturalists' Field Club. Holker and Cartmel.
Horwich I.A.P.S. Glasson Dock.

MONDAY, AUGUST 24TH.

Southampton C.C. "Portraiture." N. R. Kay.
Bradford P.S. "Discussion on Winter Syllabus."

Societies will have their meetings announced here the syllabus is sent to us at the beginning of the Session, or from time to time.



A Difference of Opinion.



THE July number of "The Edinburgh Review" devoted twenty pages to an article on three-colour work. A good deal of the article is given up to a criticism of books illustrated by the three-colour process, which need not detain us. But there is also a disquisition upon an observation by Col. von Hübl, quoted from his book on three-colour work, which may be noticed in passing. The actual quotation is the opening passage of the book:

"Every pictorial representation endeavours to secure the nearest possible approach to nature, for the absence of which it is supposed to compensate."

The "Edinburgh Reviewer" remarks on this that "it would perhaps be difficult to formulate a statement more exactly the reverse of true than that." Here is a division of opinion indeed! And, as usual, it is all a matter of point of view. There can be no doubt of the fact that the pictorial representations which Hübl had in mind, when he was writing of three-colour work, are intended to be as closely as possible faithful copies of the originals, whatever those might be. To attempt to elaborate a three-colour process on any other lines would be the height of futility. No doubt in writing of "every pictorial representation" without any qualification, Hübl was too sweeping. But his reviewer makes exactly the same mistake, as he advocates the exact reverse, and so would write "no pictorial representation," which is just as absurd as the other.

It would be well if we photographers asked ourselves what our own aims are in this connection. Do we endeavour in our photographs "to secure the nearest possible approach to nature," as suggested by Hübl, or do we endeavour to secure "the greatest possible deviation from nature," which seems to be what the "Edinburgh Reviewer" would have. Perhaps many of us aim for the former, but get the latter. Many would say, at once, that they side with Hübl. They try to get their photographs "like the thing itself," and would ridicule the idea of anything else. But, softly. Suppose they do, what then? In such a case, says the reviewer, we must also hold that, ultimately and ideally, mechanical means of representation are the only adequate ones; and that those processes are most satisfactory which refuse to lend themselves to the vagaries of individuals and are in their nature purely automatic. This puts the artist out of court entirely. He is merely an imperfect substitute with whom we put up until we get the ideal process of photography in colours. There is no doubt that to many this is not a burlesque, but actual fact. Others, like the writer whom we quote, take the view that the automatic copying of the camera is devoid of all artistic pretensions.

The point overlooked is that such "automatic copying" is no more possible with the camera than it is with the brush. It is quite impossible to exclude the artist from all share in the photographic result. Were it not so, why do we have photographic exhibitions and competitions? Are they contests of cameras or contests of men? It is a typical mistake of the photographic beginner to think them the former. "I could not do better," he explains; "I only had a fifteen-shilling camera." As he learns more about photography, he learns that had the winner used the fifteen-shilling outfit and the loser the twenty-guinea one, their



By W. Clegg.

places in the exhibition would have remained unchanged. There is ample room in photography for the personality of the artist.

Whether we are to aim at the most literal matter of fact reproduction, or whether we are rather to endeavour to give our own interpretation to the subject,

must depend on our purpose. Hübl is right in endeavouring to get the literal interpretation. Whatever use may be made of the three-colour process afterwards, the strictly faithful copy must be the first stage. It holds true in drawing and painting quite as much as in photography. What is the early training of the painter but a training in copying? He is set to copy in freehand, in perspective, from the flat, from the round—it is copy, copy, copy, until he can get a result as faithful as is possible. Until he can do that, it is only a waste of time for him to try to depart from it to introduce his own personality into his work.

The same applies with just as much force to photo-

graphy. Until the photographer can produce a good "straight" print, all attempts at modification and control are mere foolishness, and can have but one result. When the straight print can be made, we may or may not depart from it if we wish. Many will find it wiser not to attempt to do so. There is still plenty of room for good, sound, honest photography in the world, we are glad to say. But whether we do the one or the other, if it is to be of any good at all it must be deliberate and purposeful. The man who makes a straight photograph carelessly in the hope that he may stumble into art, or damage it into a picture, is merely a source of mirth. So he, too, has his uses.



Leto Plate Marker Outfits and Antique Seltona Boardoids.

IN a previous issue of *Photography and Focus* we reviewed the very effective "Plate Markers" which the Leto Photo Materials Co. had just introduced for use in connection with the Leto Boardoids. The plate markers are very simple, but most effective, appliances for giving a masked print a neat plate mark in the correct position, and we learn that since our review of them, they have sold very largely indeed, and that there are thousands of amateurs now who finish their prints in this way.

In order that those who have not yet tried this method of working, the Leto Company has issued what it calls Special Boardoid Outfits. These take the form of cardboard boxes containing all the necessary materials for making the finished mounted print, namely, boardoids, plate marker, mask, and cover mounts. A quarter-plate set sells for 1s., 5x4 1s. 6d.,

and half-plate 2s. 6d. We strongly advise those of our readers who have not yet tried the method to get one of these sets and learn from it how much it can enhance the appearance of a plain P.O.P. print.

The popular Seltona self-toning postcards, which are made by the same firm, are now obtainable in the Antique grade also; so that those who appreciate the convenience of making prints on a more substantial base than the ordinary thin P.O.P. can obtain this very attractive quality of surface on the stout postcard or boardoid base. Few photographic manufacturing firms in recent years have gone ahead so rapidly or so surely as the Leto Company—a fact that is amply explained by our knowledge of the excellence of its products and by the very clever way in which it always seems to hit the public taste.

The Minimum Pocket Ruby Lamp.

COMPACTNESS can hardly be carried further than it is in the little piece of apparatus known as the "Minimum Pocket Ruby Lamp," since, although a well-constructed metal lamp with ruby glass, it folds up into so small a compass that it is no larger than the ordinary tablet of toilet soap. The tourist must indeed be hard pushed for space in his bag if he cannot find room for such a lamp as this.

Our illustration shows the lamp partly opened; the hinged lid, when it is shut up for travelling, folding on to the box part of the lamp. The conical object within it is the burner, which takes out, and passing through a socket in the base of the lamp forms a foot for it; so that the burner, except just the end of its wick, is quite outside the lantern part of the lamp.

The burner is packed with sponge, and is provided with an asbestos wick. There is, therefore, no danger of any liquid contents spilling. Benzolene is the spirit used, and the sponge is simply saturated with benzolene, the top screwed on

and lit, and the lamp is ready for use. Considering its extremely small size, it gives a remarkable amount of light; and is, moreover, both safe and cleanly in use.

The lamp is made of japanned metal, the different parts being folded or riveted, instead of soldered, to remove all risk of damage by heat. It is made by Messrs. W. Butcher and Sons, Ltd., of Camera House, Farringdon Avenue, London, E.C., and sells at 2s. 6d. complete.



The Watkins Bee Meter with Compass.

MR. WATKINS is not one to sit down on the "rest and be thankful" system, but keeps the attention of the photographer, either by devising fresh means for simplifying the problems of exposure and development, or in dressing out afresh some of the old ones. The latest form of the Bee meter comes under the second of these heads.

If a bee in his bonnet is a synonym for weakness of intellect, a bee—a Watkins "Bee"—in his camera case is an unflinching indication of a photographer's commonsense and determination to do the best he possibly can. We need not tell the readers of *Photography and Focus* how we have advocated the use of a meter in the past, when it was laughed at and derided by almost all, as in the present, when it is almost universal.

The Bee is one of the most convenient forms, and in its

latest manifestation, with a pocket compass let into the back of it, it should be very popular. The combination is an excellent one. The compass is a very useful tool in out-door work, helping the photographer to determine when the lighting on the subject before him will be most suitable. It has not been employed in the past for this purpose so much as it might be, although many landscape workers, and especially many architectural photographers, make a point of including it in their outfit. Perhaps now that it can be part and parcel of the exposure meter it will be more extensively employed. The price of the Bee



meter with compass fitted is 3s. 6d.



"Critics?—appalled I venture on the name,
Those cut-throat bandits in the path of fame."—BURNS.

A CRICKLEWOOD reader has been kind enough to send me a print which he asks me to criticise in my *Causerie*. The prints I usually reproduce are chosen from the vast quantities entered for the various *Photography* and *Focus* competitions, and thanks to this very wide range of selection I am enabled to gather them into little collections which exemplify

The print is reproduced herewith, and, as will be seen, is of fair average technique. But why am I debarred from pronouncing it "the ordinary thing"? Because, forsooth, the photographer had to climb through a skylight to obtain it!

Is this playing fair?

I maintain that it is not. It is like insisting that the work of a painter

who paints with the brush held in his toes is more artistic than that of one who works with "that clumsy tool—the human hand." The fact that he uses his toes may make the former artist a more notorious personality than the latter; but it does not affect the intrinsic value of his work. If my Cricklewood friend submits his print to the Salon, is he going to write on his entry form, "Please note, this was taken from a roof under circumstances of difficulty

and discomfort"; and if he does, will the selection committee be moved to hang the work in preference to one which was taken from *terra firma*?

But for this reader's covering letter I should have supposed his view point to have been on a hillside; even if I had guessed the hotel roof, my withers would have been unwrung. The picture, in fact, is an ordinary topographical landscape, pleasant enough; and apart from the private interest infused into it by the narrative of my friend's acrobaticism, not wildly unique. One thing it illustrates with remarkable force—the weakness of photographers for allowing the mere difficulties overcome in producing a work to influence them in favour of that work. The overcoming of difficulties has nothing to do with essential art. It is not "artistic" to take photographs at the North Pole. It is not "artistic" to develop a decent negative while sitting in a cloud of mosquitoes in a tent in the tropics. It is not "artistic" to

risk your neck for a snap on an Alp. The results may be artistic in themselves; the process of producing those results weighs *nil* in the balance. Art critics know nothing—or ought to know nothing—of the life-history of the picture at which they gaze. Its producer knows, of course; and, as we have seen, the knowledge sometimes biases him.

In short, I am ready to praise the personal enterprise of my Cricklewood friend, but his enterprise does not make me in the least inclined to praise his picture. If he spoilt a suit of clothes to get it, I am sorry for him; but my opinion of the print remains what it was before I read his letter. My opinion is this: The subject is too scattered; there is no "principal object, no focus of interest, and no balance; and a sky is badly needed."

"Repose" is evidently the work of another aspirant to unusualness—and a more successful one. Its realism is at once fascinating and repulsive. One's first exclamation is, "Here, at last, is a novel picture-subject!" One's second is, "But how ugly it has turned out!" At the risk of offending its owner I am afraid I must pronounce the fault to be the dog's. It is, pictorially speak-



Ilfracombe.

the same, or similar, points. There is, of course, no absolute rule which compels me to stick to competition prints only; at the same time, I think it fair to mention that I cannot guarantee to utilise prints sent to me at odd times, for obviously they may not happen to illustrate the particular fault or merit on which I am discoursing. I see no reason, however, why I should not this week accept the Cricklewood gentleman's invitation, and talk about his print, which is a view of Ilfracombe.

The letter which accompanies the print says: "I should like to escape from that rut in which so many amateur photographers find themselves, i.e., the family group, etc., and being at Ilfracombe I thought of a picture of that town from the roof of the hotel at which I was staying. . . . You certainly cannot tell me that it is the ordinary thing. You should have seen the mess I got into, climbing out of the skylight with my stand and 5 x 4 Sanderson."



Repose.

By W. E. C.

ing, not a pleasing dog. It has a curiously nude and meaty aspect, and its abandonment in slumber looks almost deathlike. Now a dead dog is scarcely a poetic theme; and for some reason which I cannot explain I feel that some other breed of dog—a hairier dog, maybe—would have looked less dead when asleep. This dog may be the darling of the photographer's heart, in which case I am sorry to speak disrespectfully of it; but I must be honest. However, I can unstintedly applaud the conception of the picture, although I don't much care for the way it has been carried out. Possibly, by the by, the rather grotesque composition of the scene is to some extent traceable to its odd perspective. At the same time, I am ready to admit that I have no suggestion to offer as to how this could have been remedied.

The author of "Eager for Home" has got hold of a good idea, and has only just missed making a success of it. Note the admirable composition of this print. The largest boy is placed almost exactly right, and is balanced beautifully by the lads on his left hand and the group in the distance. His figure is full of action too, and has none of the marionette awkwardness from which snaps of persons walking or running so often suffer. Conceivably both his position in the picture and his position in action were happy chances; but—as I have pointed out in dealing with the Ilfracombe view—it is not my business to enquire into the autobiography of the photographer when



Eager for Home.

judging his photograph. I must give him credit for the result as it reaches my hands—and to accuse him of "mere luck" in his work would be to vitiate my criticism by personalities. This print, then, strikes me as a well-composed and well-seen attempt at rendering an everyday and very human incident.

It fails, nevertheless, and fails rather seriously. The boys are out of focus—even the largest boy who tells the "story" of the picture mostly



A Busy Half Hour.

(though without the other boys and the school buildings as a background he would have told no story at all) is fuzzy.

Now fuzziness may be admissible on occasions; but it is not admissible here. Why not? Because the picture is sharp at a place where it is unimportant and fuzzy at a place where it is vitally important. This betrays the secret that the fuzziness of the boys was unintentional. The paving stones in the foreground are so sharp that their pattern distracts attention from the boys, whose story the picture is supposed to tell. If the largest boy had been sharp all would have been well, for even a slight adjacent sharpness of the stones would not have distracted our attention from him. And, in fact, by careful printing, say on one of the pigment papers, the stones could have been subdued out of their prominence. As it is, they cannot be subdued, except perhaps at the expense of the boys.

"A Busy Half Hour" is another unusual subject, which, considering its nature, has been well registered. It is not artistic, but it probably did not set out to be artistic. I imagine it is merely a portrait of these two men at their daily work, and as such gave satisfaction to the sitters—or rather standers. All the same I do feel that there might have been some touch of

romance infused into the picture by more careful composition and suppression. Life in a signalbox is romantic, at any rate to those outside. The photographer has unfortunately split his subject into two very divergent halves. This, one may guess, is not entirely his fault. The signalmen had no time to waste on attitudinising in positions away from the immediate demands of their labour. The only remedy that I can suggest is that the figure on the left be trimmed right off (I should even trim off the stove, too), and our interest thus concentrated on the very alive and really rather finely posed man on the right. If this little bit of the print be then enlarged, an effective picture will be made, especially if, in enlarging, the streakiness of the levers be a trifle subdued, and the distant window toned down.

I don't say that the enlargement will be very impressive as a picture; but it will be a good honest depiction of a signalman at work—only marred by the fact that the model is looking at the camera instead of at his task.

Let me conclude by repeating that originality of subject is a good thing, but for its originality to be perceptible only to the producer won't carry it very far in the world of exhibition committees, competition judges, and such-like callous members of the Bandit tribe. "Ilfracombe" was perhaps the most difficult picture to make of the four we have considered this week—but to the eye it is not nearly so original, on the face of it, as its three companions. I hope, therefore, that the Cricklewood reader will try again, and that next time he will try to find a new subject instead of a new way of getting an old subject.

By F. Biggs.

By Edgar Brooke.



Unorthodox Portraiture.

By Sydney J. Tayler. Special to "Photography and Focus."

Our contributor describes how the remarkable series of portraits, which we reproduce this week, all of the same sitter, were taken.

"**L**OOK here," said my brother one day recently, when I had photographed him for the fiftieth time; "why don't you take me in some character for a change? I could make up as a fine hooligan or nun or something."

There did not seem much similarity between the two characters which he had mentioned in the same breath, and I rather doubted whether it would not be a mere waste of plates. However, he had soon succeeded, with the aid of three handkerchiefs and a piece of black cloth, in converting himself into a very meek and saintly nun, and my first picture, reproduced herewith, was the result.

"What about the hooligan?" said I, as he removed his wrappings.

"Oh, we can easily do that with a bit of burnt cork." He proceeded to "claw" his hair over his eyes, wrapped a "choker" round his neck, half turned up his collar, and then, with the aid of a mirror, corked his face up most scientifically, so that our second attempt, "Ishmael," was even more successful than the first. I discovered that the model's villainous aspect was considerably improved by taking him at close quarters with a short focus lens, so as to produce a slight enlargement of his nose and the top of his head, the pose lending itself to both these effects.

These negatives turning out in so surprisingly convincing a style, we set to work to plan out some more characters, and evolved, in due course, the rest of the series of seven, in none of which did we employ any but the simplest make-up. Details of their production are appended in order.

3. "The Witch's Curse." Burnt cork was liberally rubbed in under

and round the eyes; the lower lip was corked into a thin line. The expression for this, as for all the rest (excepting Nos. 1 and 5), was arranged in the mirror before the model took his seat, and it was something of a strain to hold it long enough for focussing and exposing. The "Witch" broke down altogether, I am sorry to say, after three or four seconds, and I had to close the shutter hurriedly, so that this negative is not so fully exposed as it might have been.

SEVEN PORTRAITS OF THE SAME MODEL.

NO. 1.—THE NUN.



4. "A Losing Game" (see page 304). This

effect is mainly a matter of lighting. I do not pretend to know what game the gambler is playing in so strenuous a manner—poker, perhaps. The ruffled hair in this, it will be seen, is disarranged in quite a different manner from the tousled mop of "Ishmael."

5. "The Mild Hindoo" (see page 305). One of the most difficult for the model, who had to maintain an absolutely expressionless "expression" to secure the Hindoo character. The little moustache was corked in, and a small amount of blackening done generally all over the face. The turban is a bath towel, and not quite as convincing as it might be, but could easily be improved upon.

6. "The Church Militant" (see page 307). There is no make-up in this. The model plastered down his hair on either side, put on a choir cassock, turned his collar back in the front, and ditto his waistcoat, and donned a pair of pince-nez and a virtuously superior expression.

7. "One of the Gang" (see page 308). This may be considered either as a pirate or a sailor of the olden times. We used a lot of cork, especially round the chin and jaw, and the irregularity of the teeth was obtained by the simple plan of sticking small pieces of black paper over one or two. The ear-ring is a piece of wire,

the ends of which were sprung apart to slip it over the lobe of the ear, and the shirt is a pyjama jacket. Camera distortion was again requisitioned for the purpose of obtaining a different shape and cast of face, so that the character should not resemble any of the others. We have the pirate's fist, clutching a sword-hilt, in the negative, but the distortion is

SEVEN PORTRAITS OF THE SAME MODEL.

No. 2. ISHMAEL.



so apparent in the arm, which is, of course, unnaturally foreshortened, that I have trimmed it out, to the great improvement of the picture.

The conclusion, then, of all this is that if we have an obliging brother who does not mind taking trouble and dis-

SEVEN PORTRAITS OF THE SAME MODEL.

No. 3. THE WITCH'S CURSE.



figuring himself temporarily for our benefit, we can obtain a considerable variety of portrait studies from him, and usefully employ a couple of hours in photographic work which might otherwise be wasted in something much less interesting—grumbling at the weather, for instance.

For other illustrations see pages 304, 305, 307, and 308.



P.O.P. with a Very High Gloss.



THERE are circumstances under which the ordinary squeegeed P.O.P. print is not so glossy as the photographer might like, and even when the very highest possible gloss is not required, there is still the inconvenience, which every P.O.P. printer must have suffered, of losing the gloss as soon as the print is damped in the mounting. When it is worth the trouble all this can be prevented by the process known as enamelling, which used to be very commonly employed with albumenised paper prints, before that process was supplanted by the modern **gelatino-chloride**.

Enamelling of this kind must not be confused with the

other photographic process known as enamelling, in which the picture is transferred to a surface of glass or porcelain and burnt in. It is unfortunate that the two processes should both have the same name; but this has gone too far now for there to be any possibility of alteration.

Enamelling consists of cementing a highly glazed film of collodion to the surface of the print. It is a little more trouble than squeegeeing, but it is in no sense a difficult process. The requisites are some "enamel collodion," which can be obtained from any big dealer, some sheets of perfectly flawless glass (patent plate is the best), some gelatine, and some French chalk.

The gelatine may be "photographic" as supplied by one of the big dealers, but the ordinary packet gelatine sold for domestic purposes will answer just as well. It is important to get the French chalk from a perfectly reliable source, as this is a substance which is often met with in a most impure or adulterated form, and if such a sample is used the prints will not strip from the glass, and will be spoiled.

The first operation is to clean the glass, which may be accomplished with soap and water and a stiff brush, following this up by an ample rinsing to get rid of all traces of the soap. When the glass is dry, one side of it is dusted lightly over with the French chalk, which is well rubbed into the glass and then polished off. As each sheet is polished, it should be very gently dusted, so as to be perfectly clean, and coated with enamel collodion. This is poured on in a pool, just as in varnishing a negative, is flowed into all four corners, and then back into another bottle. The plate is held vertically and rocked from side to side for half a minute to prevent the collodion from setting in ribs, and as soon as it is seen to be tacky, it is stood in a rack out of the dust to dry, and another plate is coated. The collodionised glass may be kept indefinitely before use, if its surface is uninjured, but as it is very delicate, it is best only to coat it as required. As it is dry in less than half an hour, this does not lengthen the proceedings unduly.

The great secret of successful enamelling is to get the glass thoroughly cleaned in the first place, and properly treated with the French chalk in the second. The chalk treatment is to enable the film of collodion to strip readily from the glass when the operation is finished. In order that this may take place, the whole surface of the glass must have the finest possible coating of the chalk—a coating which must not be perceptible to the eye. To secure this, the chalk must not be simply applied and then dusted off, but must be, as it

were, polished into the glass, which is then further polished until it appears clean.

A solution of a quarter of an ounce of gelatine in half a pint of water is now made. The gelatine is soaked in the cold water until perfectly soft, and the vessel is then stood in hot water until solution is complete. It is best to make the gelatine solution fairly hot, as it is then more easily filtered. It is strained through a couple of folds of fine cambric into a clean warmed dish.

The P.O.P. print, which should have been hardened in alum or formaline before drying, is placed in the gelatine while this is still just warm and liquid. When the print is limp the collodionised glass is slipped underneath it, the print being face downwards, and the glass with the collodion coating uppermost, and the two are brought out in contact, care being taken to avoid any air bells. After gently squeegeeing, it is put aside to get thoroughly dry. When quite dry, a knife should be passed round the edges of the print, one corner gently raised, when it will strip off with the most perfect gloss.

For Users of Single Metal Slides.

TO prevent any possibility of exposing a plate twice over, when single metal slides are employed, the following little dodge will be found useful. A piece of fairly stout card is taken a quarter of an inch or more larger than the slides in one direction, according to the way in which they fit into the carrying case. One end of the card will then protrude above the slides, and on one side of this the word "exposed" is written and "unexposed" on the other. After each plate is exposed, the slide is replaced in the case, the card put next it with the side marked "exposed" turned towards it. Then whenever the case is open, the card is seen separating the exposed from the unexposed.

SEVEZ, PORTRAITS OF THE SAME MODEL.

No. 4. A LOSING GAME (SEE PAGE 302).





TIME DEVELOPMENT.

A question and its reply. By the Editor.

Dear Sir, Will you kindly let me have a metol-hydrokinone formula as follows: (1) A concentrated stock solution. (2) Degree of dilution to develop a plate in two and a half minutes. (3) Degree of dilution to develop six plates in twenty minutes, in a tank holding sixteen ounces.—"Spectrum" (Toronto).

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ERE is a question which in one form or another is constantly put to us; and it is one, unfortunately, to which we have to return an answer which the enquirer can only regard as unsatisfactory. For it is based on a misconception of the nature of

development, and of the many factors which govern it. If the first and second sections of the enquiry were susceptible of a definite answer, how very simple would be the problem of development!

It is, of course, quite easy to give a satisfactory formula for a metol-quinol developer which can be kept in a single stock solution, although this cannot be very concentrated on account of the sparing solubility of the metol. Here is a formula of tested worth. The ingredients are dissolved in the order named, using warm (not hot) water, and seeing that each is dissolved before the next is added:

Metol	...	...	35 grains
Sodium sulphite	...	...
(crystals)	...	2 ounces	
Hydrokinone	...	50 grains	
Sodium carbonate	...	...
(crystals)	...	1½ ounces	
Water	...	1 pint	

Equal parts of this solution and of water are taken for use, or it may be diluted further if preferred.

But our correspondent goes on to ask the degree of dilution required to develop a plate in two and a half minutes. This is a matter which must be determined by experiment, which he must do for himself, since it depends upon the plate or film that he is using, and the temperature at which he works, for both of these influence the time very largely.

Mr. Watkins has given more attention than anyone to these development problems, and in his recent classification of the different plates on the market he shows that the plate which takes the longest to develop requires more than five times as long as the plate which develops the quickest, using the same developer at the same temperature for both. This means that if we gave our correspondent a degree of dilution which

would develop one make of plate in two and a half minutes, the same solution might require twelve or thirteen minutes with another make of plate.

In reply to this, it will no doubt be pointed out that makers of developing machines and of stand developers give formulæ or provide materials which, they specify, will develop in a certain stated time. These formulæ generally apply to one particular make of film or plate, as in the case of the Kodak machines, which are made for Kodak film, the speed of development of which is known. If film of any other make is used in the Kodak tank, the prescribed time may or may not be right, depending on whether the other make of film is of the same speed of development as the Kodak. As for any developers which may be put forward as developing all makes of plate in the same time, we can only say that this is an impossibility, and that the photographer who uses them must check such statements by his own results, if he would not go altogether astray.

Temperature, again, has a very large influence on the speed of development; and its influence is not the same for all developers. Some are slowed down by lowering the temperature very much more than others. Such a developer as that described above is affected less by temperature variations than most. We may say that taking 65° Fahr. as the normal time of development, this time will be decreased by about twenty per cent. at 70° Fahr., or increased by about twenty per cent. at 60° Fahr. In employing time development, it is well to try and keep within these limits.

Our reply to such an enquiry as we have quoted, then, is that the photographer must find out the answer for himself. We will endeavour to point out how he can do it. The task is not a

very difficult one. The first requirement is a correctly exposed plate—subject not very important, say for choice an ordinary landscape, or a group of buildings in sunshine and shadow. The exposure should be ascertained by trial, or three or four plates may be exposed for varying times, and developed

SEVEN PORTRAITS OF THE SAME MODEL.

No. 5. THE MILD HINDOO (SEE PAGE 302).



together, note being taken of the correctly exposed one only. The time of development, as we have often pointed out, is the same, whether the plate has been correctly exposed



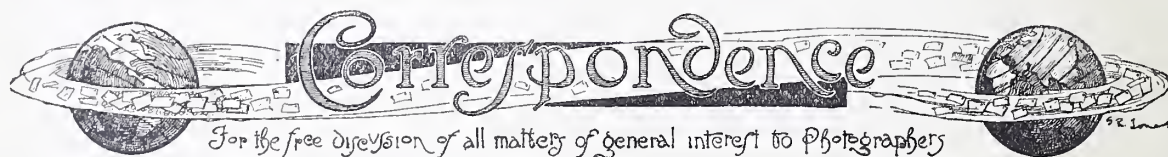
Syringa blossom.

G. A. Tomkins.

or whether the exposure is incorrect; but it is not easy from an incorrectly exposed plate to determine what the correct time should be.

The developer and a jug of water for dilution should be left in the dark room an hour or two before use, so as to have ample time to come to the temperature of the room. A thermometer—a bath thermometer will do—may be left in the water, and its reading noted before using the water. The time when the developer is poured on is noted, and then the dish is kept covered over until development has progressed some little way. It should then be easy to see which of the plates has had the correct exposure, and the rest may be ignored. The extent to which development is to be carried must be determined as accurately as possible by looking at the surface of the plate and through it, and then when development seems to be complete, the time is noted and the plate is fixed. If it is correctly developed, the time which development took will be the time which plates of that make will require with that developer at that strength and at that temperature, and a note should be made accordingly. If development is not quite correct, either a further trial must be made, or we may estimate from the appearance of the negative how far it is wrong. This can often be done with quite sufficient accuracy without making another trial. When the same developer is to be used in a stand or tank, and is to be diluted, the time taken must be ascertained in the same way. It is not possible, usually, to deduce from the time taken with a strong developer the time which will be required for the same developer more dilute. If we double the bulk of the solution by adding water, we approximately double the time it will take to develop, or even prolong it a little more than this. But for tanks the dilution is generally greater than this, and for great dilution the time required is not proportional to the dilution, but is longer. The same strength of developer used in a dish which is kept rocking, and in a tank which is only agitated now and again, will develop the plate in the dish much quicker than those in the tank. This is another reason for ascertaining independently the time taken for tank development.

We have answered this question at length, because it is one which is very often put to us. We are only sorry that it cannot be answered more definitely. But we trust we have made it clear why this is impossible. It only remains to add that the task of determining the correct time is not a very formidable one, and once performed the result may be noted and used indefinitely. Every development carried out with it thereafter will check its accuracy, and make the task of time development an extremely simple one.



The Editor is not responsible for the opinions of his correspondents.

BLEACHING OF RUBY GLASS.

Sir,—I am enclosing for your examination and remarks a piece of ruby glass which has lost so much of its colour by exposure to sunlight as to be unsafe for darkroom illumination purposes. So many amateurs ridicule the idea of ruby glass being even slightly affected by sunlight. Everyone knows how quickly fabrics and papers become bleached, but few seem to think or to know that coloured glass loses its colour slowly but surely.

This glass is about six months old. I mean that it has been exposed for that length of time. You will notice it is quite pink now.

Yours, etc.,

C. KEMSEY BOURNE.

[The specimen of ruby glass which accompanied Mr. Kemsey-Bourne's letter was a pink rather than a red, and examined in the spectroscope passed more or less light right up to the violet itself. As the whole piece was affected, it was not possible to compare a faded with an unaltered part; but there could be no question that it was quite unsafe for any of the purposes to which ruby glass is put.—ED.]

REPLACING BROKEN NEGATIVES.

Sir,—I have read your paragraph under the above heading in *Photography and Focus* of 4th inst. with special interest, having quite recently been a victim to a broken—valuable—negative. Whilst appreciating the remedy you offer, will you allow me to state the one I adopt? I take a photograph of a good P.O.P. print.

This plan I have found most successful. The negative may be considerably smaller than the original, but this can easily be enlarged to the original size.

A curious case of the kind has just occurred to me. On the 3rd inst. I managed to get a capital negative of a winner, clearing the last hurdle in a race at Newton Abbot. After developing it I noticed a crack in the negative. I placed it in the frame when dry, very gently, closing the frame just as carefully, but the crack increased from end to end. The first print had an ugly mark across it, while the second had no mark at all. Why, I know not. I printed a third, and that again was as badly marked as the first. I then photographed the one that escaped the mark, and I have a delightful negative.

Yours, etc.,

CARSLAKE WINTER-WOOD.

Carbon Printing Troubles.

BY "SINGLE TRANSFER." Special to "Photography and Focus."

CARBON printing is not a difficult process by any means, but the beginner may find that it does not go quite as well in his hands as he would wish, yet may not be able to learn what is amiss. The following summary includes all the troubles with which the writer has met during more than ten years' experience of the process, and may be of use to other workers.

The tissue will not adhere to the transfer paper. This may be due to several things. Excessive over-printing is one cause. If the tissue has become insoluble, either from noxious fumes, from impure chemicals, or from being kept too long, this result may be met with. If it is too limp, from damp, when it is immersed in the water, it will not curl up at first as it should do; the uncurling, which is the sign that it is ready to be squeegeed, therefore passes unnoticed, and when the tissue is brought in contact with the transfer paper it is already curling the reverse way, and therefore is not in a condition to adhere.

Insolubility of the tissue may be brought about by other things than keeping or over-printing. If by any error the sensitising bath is acid, this will happen. Very slow drying may also bring on insolubility; and heat will very rapidly produce it.

A common defect is that which goes by the name of reticulation. The whole surface of the print is broken up into a kind of fine network of what looks very much like cracks. This may be caused by sensitising the tissue on too strong a bath, or by over-printing and then using for development water that was too hot, to try to remedy the over-printing. There is no remedy for a print that has reticulated; but it is simple enough to prevent it occurring in the future.

Curious greasy-looking marks on the finished print are due to stopping development too soon. Although there is a great deal of control possible in carbon printing, by varying the temperature of the water used for development, whatever temperature is used the print must be left in the water until all the gelatine that can be dissolved at that temperature has been washed away. Otherwise these greasy marks will remain to deface the print.

A number of small shiny spots visible on the finished print point to air bells between the tissue and the transfer paper. These may be due to using water which is highly aerated, as some town water is; and if there is persistent trouble from this cause the water used for soaking the transfer paper must be water that has been boiled briskly and allowed to go

cold. This expels the dissolved air. A more common cause of the shiny spots is that air bells were adhering to the transfer paper and were not noticed. It is a good plan to make a practice of passing a squeegee across the transfer paper, back and front, soon after it is put into the water. This will break up and remove any adherent bubbles of air.

The edges of the print may wash up or frill during development. This may be caused by omitting the safe edge or by putting it next the film and not on the glass side of the negative. It is not always understood that the safe edge is put on the glass side in order that the print of its edge on the tissue may not be quite sharp. It is the little vignetting

SEVEN PORTRAITS OF THE SAME MODEL.
No. 6. THE CHURCH MILITANT (SEE PAGE 302).



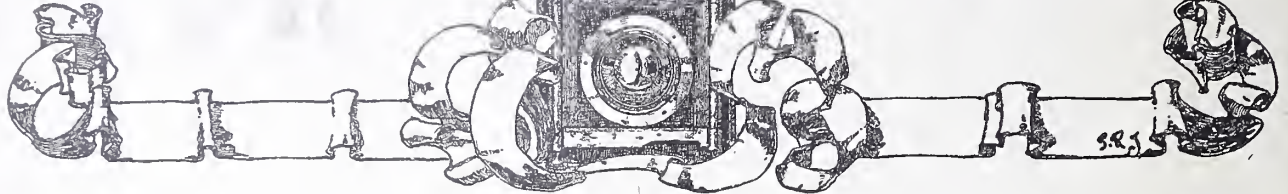
which takes place which makes the safe edge efficient. If the water is used much too hot, the edges of the print may frill, even if a safe edge has been used. On the other hand, when the exposure has been correct, the water is only just at the normal temperature, and the transfer paper is of a smooth character, it is quite possible to develop a print safely that has never had a safe edge at all. Another cause of frilling is beginning to develop the print too soon after squeegeeing it to the transfer paper.

Bubbles or blisters which make their appearance during the development of a print are amongst the most annoying of defects. They may be due to careless squeegeeing, to the use

of water that is too hot, but still more often to the use of rough, thick transfer papers that have not had a sufficiently long soaking beforehand. The thicker and the rougher the transfer paper, the longer it must be soaked before it is in a fit condition to have the tissue squeegeed upon it.

Little tears in the film of tissue that is being developed may be caused by the use of too powerful a stream of hot water. This should never be allowed to fall upon the high lights, as the film there is excessively thin, and therefore tender. A comparatively strong stream may be directed upon the thicker film which forms the shadows without any risk of injury.

PRACTICAL PARAGRAPHS



DRYING NEGATIVES QUICKLY.

The most important factor in drying negatives quickly is a current of air, and if this is to do the work properly it must be free from dust. I find that the simplest method of getting this is to open a window for an inch or two, and to place the negatives in a row on the top of the sash of the lower part of the window, leaning against the glass of the upper half. The film side is underneath, and the ascending current of air, which seems always present under such conditions, is free from dust particles, and dries them quickly and well.—T.V.E.

SEVEN PORTRAITS OF THE SAME MODEL,
No. 7. ONE OF THE GANG (SEE PAGE 302).



AN ARROWROOT MOUNTANT.

The following mountant keeps very well, and will be found to be a very powerful sticker. Half an ounce of arrowroot is made into a thick cream with cold water, and is stirred until perfectly smooth. It is then diluted to four ounces, and the vessel which contains it is stood in a saucepan of boiling water for five minutes, stirring the arrowroot occasionally. Half an ounce of gelatine is in the meanwhile soaked in four ounces of cold water until quite soft, and this too is placed in boiling water for the gelatine to dissolve. The two solutions are then mixed thoroughly by stirring, half an ounce of methylated spirit in which five grains of thymol is dissolved is added, and the mountant transferred to screw-topped pots.

* * *

EXTEMPORISED PRINTING FRAMES.

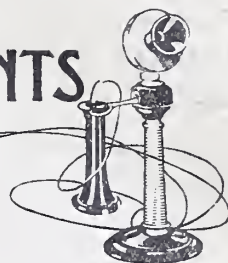
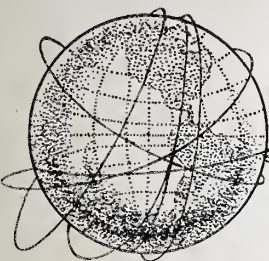
When a number of negatives are to be printed at once, and the stock of frames is not sufficient, it is always possible to extemporise a few, if the photographer has any of the well known "Bulldog" paper clips at his command. A piece of stout card is cut to the size of the negative to be printed, and across its smaller dimension, about one-third from the end, a straight clear cut is made almost but not quite through it. Across the card, on the opposite side to the cut, is glued a broad strip of tape, which, with what of the card was not cut through, will serve as the hinge. To load such a printing frame, two or three pieces of clean blotting paper are laid on the card, the P.O.P. is put on that, and the negative on too. A clip on each side holds all in position, and the frame may be put out at once for printing. If the negative is larger than quarter-plate, it will be found advisable to put two clips on each side, to ensure the paper being pressed well into contact.

* * *

TO LOOSEN STOPPERS.

When a stopper is stuck fast in a bottle, so that it cannot be got out by ordinary means, the following methods should be tried, in the order in which they are given, as each is more drastic than the one before it, and therefore more likely to result in smashing the bottle. (1.) Hold the bottle firmly, and tap the stopper alternately on one side and the other with a piece of hard wood, giving the taps an upward tendency if possible. (2.) Hold the bottle horizontally over the sink, and pour a gentle stream of very hot, but not boiling water, on the neck where the stopper touches it. After a moment or so of this, put the bottle upright, and give the stopper a tap or two as before. (3.) Take a long piece of thick string, pass it once round the neck of the bottle, and get a friend to hold one end, while the other is tied to some firm object. Then while the string is tight run the bottle quickly backwards and forwards along it. The friction of the loop of string will make the neck so hot that the stopper will soon be loosened.

REPLIES TO CORRESPONDENTS



REGULATIONS.—(1) Envelopes must be marked "Query," and the "Enquiry Coupon" found elsewhere must be enclosed. (2) The full name and address in addition to a *nom-de-plume* must be given. (3) Only one question on one subject is allowed in each letter. (4) Prints may be sent for criticism, but a separate coupon must be sent with each print, and a stamped addressed envelope (not loose stamps) for their return. Queries are dealt with in strict rotation in the order received. Only "Urgent Apparatus" queries will be dealt with by post, for which purpose a stamped envelope must be enclosed.

THE WEEK'S QUERY.

Enlarging Lantern.—I am making a half-plate, enlarging lantern, and am at a loss to know at what distance the illuminant should be from the condenser. I have not got the condenser yet, so cannot focus the light on it. I want to make enlargements from quarter or half-plate to 12 by 10 or 15 by 12. Is it necessary to fit the condenser in a cone?—H. GRIGGS.

The condenser is simply a lens, and must be so placed that it forms an image of the illuminant somewhere in the neighbourhood of the back lens of the enlarger. The distance of the illuminant from the condenser depends, therefore, on the focus of the condenser and the distance of the condenser from the enlarging lens; and these particulars are not given. In the absence, therefore, of data, which are necessary for a specific reply, we can only indicate how the distance may be calculated.

The first thing to ascertain is the distance of the lens from the negative that is being enlarged. In a half-plate enlarger the lens, we imagine, will be something like seven inches in focus. When enlarging from half-plate to 15 x 12 the ratio of enlargement is about $\frac{3}{2}$ times. To find the distance then we multiply the focus by the ratio + 1 and divide by the ratios $7 \times (\frac{3}{2} + 1) = 24\frac{1}{2}$. $24\frac{1}{2} \div \frac{3}{2} = 9\frac{1}{2}$.

The lens will therefore be $9\frac{1}{2}$ inches from the negative, and as this is not quite in contact with the condenser, we may say that the lens will be about 10 inches from the condenser.

Having ascertained this, we will assume that the focus of the condenser is six inches. It will probably be more, but the method is the same. The question then is at what distance must an object be from a 6in. lens, for an image to be formed on the other side of the lens, ten inches from it. The rule is to multiply the focus by the distance and divide by the distance less the focus. Accordingly we get

$$6 \times 10 = 60. \quad 60 \div (10 - 6) = 15.$$

The distance of light from condenser under these hypothetical conditions will be 15 inches.

We have given the calculations, as they help to teach the lesson that however different a condenser may be in appearance from some of the other lenses with which photographers are familiar, it is essentially the same in principle. The calculations will give a rough idea of the positions of the different parts, but the actual adjustments should be determined by trial with the condenser and lens that are to be used. There is no need for the condenser to be mounted in a cone, although this is a convenient form. So long as it is enclosed with the light, and the distance between illuminant and condenser is left adjustable, for it will require alteration for different degrees of enlargement, the actual shape of the enclosure is unimportant.

REPLIES IN BRIEF.

DAVID MCKAY (Coleraine).—Both are excellent, but of the two the higher priced one is certainly the better.

H. BREACH (Chelmsford).—The H.H. developer is supplied by Houghtons, Ltd., 83 and 89, High Holborn, London, W.C.

STANDA (Dublin).—There seems to be little doubt that the lines are due to defective plates. We have seen something of the kind before. Perhaps you would send us a postcard stating the make of the plate used. There is nothing in the tank to account for them.

E. WHALLEY (Burnley).—We cannot tell the cause of the blisters, but it is probable that the solutions used are too warm. We should be inclined to try a weaker hypo bath; and our own preference for gaslight papers is certainly for the acid bath. Please note rule 3.

PECTO (Dalston).—"Country Life," "The Sphere," "The Graphic," and "The Illustrated London News" all purchase photographs extensively; but we cannot tell you "the style the different papers want." The only plan that is of any use is to get the papers and study them.

O.G.F. (Streatham).—You are no doubt thinking of the Mattos Company; but we have not heard anything of them for some little time, and do not know any firm to-day which makes "sensitised silk, satin, wood, calico, vellum, etc." The Rotary Photographic Co. supplies sensitised satin.

XXI. (Belfast).—We were very glad to get your letter and hear that you liked the paper so much. We have asked our publishers to send you the list of books, and Messrs. Marshall, Brooks, and Co., to send you the index. Our next index will be published at the end of the year, and will include all issues since the combination.

J. T. PHILLIPS (Guernsey).—For the present.

W. SHILLITT (Sheffield).—We have asked our advertisement department to look into the matter.

ARCHER CLARKE (London, S.W.).—Thanks for your note. We cannot say why Chester was called "sleepy" unless it was that in the print it had a drowsy look.

N.W. (Woking).—You are partly answered at length in an article this week; we need only add that pyro-ammonia is not at all suitable for tank development.

ACID E. (Birmingham).—Yes, a pinhole could be used, but the exposures would be very long. Rule 3 has been overlooked by you; but, in any case, Nos. 2 and 3 could not be answered by us, as you give no idea of the degree of enlargement.

PUZZLED (Winchmore Hill).—The second blurry image is undoubtedly a pinhole image which has impressed itself on the plate while you have been making preparations for taking the group. If you carefully examine the front of your camera we expect you will find the hole.

W. E. SMITH (Gateshead).—The cover of *Photography and Focus* certainly renders any light which passes through it much less likely to fog a plate, but we do not recommend it as a means of obtaining red light in a dark room. Two thicknesses of Ruby Christia paper, which you can get from any dealer, will answer much better.

W. BROWN (Forest Hill).—Certainly you can not. The question of copyright does not arise; it would be one of a breach of an agreement made between you and the exhibition authorities. Surely, too, you have overlooked the moral aspect of such a proceeding; a little thought will, we feel sure, show you that it is hardly justifiable.

PORTLIGHT (Walthamstow).—Your question is not capable of a direct answer. It may be anything from 2,000 upwards. With the introduction of enclosed arc lamps, the light from which is much richer in blue and violet rays than that from the older forms, the relation between visual candle-power and photographic power has been made uncertain.

HAND CAMERA (York).—No doubt the Thornton-Pickard Co. would do what is needful, and the shutter named would answer, the focal-plane being the one we should prefer. The camera would do very well; but you would have to put up with a good many failures at first. We could not advise anyone to learn hand camera work with a half-plate instrument, as it certainly wants more skill than a smaller one.

I.O.T.A. (Skipton) writes: "Is there no method of transferring the film from a P.O.P. print to glass? Could the print not be cemented with a transparent but waterproof cement to the glass, and, when dry, the paper got rid of somehow, and then a new negative made by contact printing? A.—It is not possible with ordinary P.O.P. to remove the paper satisfactorily. If there is enough contrast in the print for a negative to be made by contact at all, it would be better to do it with the paper still backing up the film; but it is usually better to put the print up and rephotograph it.

COON (Chesterfield).—A combined bath can be made of the following ingredients (Wellington and Ward's formula):

Hypo	...	...	...	...	...	...	...	...	8 ounces
Citric acid	...	...	...	...	...	...	...	...	20 grains
Alum	...	...	...	...	...	...	...	...	200 grains
Lead acetate	...	...	...	...	...	...	...	...	20 grains
Hot water	...	...	...	...	...	...	...	...	1½ pints

The hypo is dissolved first, and the other ingredients added in the order named. When cold the clear liquid is filtered or decanted off for use. The toning bath is made by adding one grain of gold chloride dissolved in a dram or two of water to six ounces of this liquid. For the colour obtained, see article in *Photography and Focus* for June 30th, page 155.

FRANK SMITH (Norwich).—A good two-solution metol hydrokinone developer may be made up according to the following formula:

No. 1. Metol	...	...	...	...	...	...	...	...	40 grains
Hydrokinone	...	...	...	...	...	...	...	...	50 grains
Sodium sulphite (crystals)	...	...	...	...	...	...	...	...	120 grains
Potassium bromide	...	...	...	...	...	...	...	...	15 grains
Water to	...	...	...	...	...	...	...	...	1 pint
No. 2. Caustic potash	...	...	...	...	...	...	...	...	180 grains
Water to	...	...	...	...	...	...	...	...	1 pint

In making No. 1 the ingredients are dissolved in the order named, taking care that one is dissolved before adding the next. Equal parts of each are taken for use.

HOLIDAY INFORMATION.

BRISTOL.

In reply to E. Cumberland Frear.

Bristol, standing on the Avon, the boundary between Gloucester and Somerset, is on the main line of the Great Western Railway, and is reached from London in from two to three hours. It is also in touch with the Midlands, the North, and Wales by the Severn Tunnel, and the Midland and other lines. It is a large flourishing commercial city, well supplied with hotels and lodgings of all kinds.

Bristol itself affords varied opportunities to the photographer. Its most famous church is St. Mary Redcliffe. The side aisles here are remarkable, being continued into the transepts. The pulpit and south entrance, and the Chatterton room should not be missed. The Temple Church is another building to be noted, with its well-known leaning tower. Many of the houses in the city are very ancient. The famous old Dutch House has at last been condemned as unsafe, but some very ancient houses are to be seen on the left about a hundred yards before reaching Bristol Bridge. Bristol Cathedral is worth a visit. It has a fine screen, recently completed, and the stonework of some of the tombs is very fine. The old Bishop's Palace was gutted in the big Bristol riots, and only one grass-grown wall marks the site. The entrance gate to the Cathedral is very interesting.

The harbour and docks can always be relied on to furnish some good shipping scenes, and the Clifton Suspension Bridge and the Avon Gorge should both be seen. Following the course of the river Frome from Stapleton (which can easily be reached by electric tram) some very pretty scenery will be met with. If we take the Brislington tram from the station, we travel south-east, and soon find ourselves among the upper reaches of the Avon.

There are many places of interest within easy reach of Bristol. Cheddar, with its ancient market cross and cliffs; Bradford-on-Avon, with a Saxon church and tithe barn; Bath, which needs an article to itself, are only a few. Cheap excursions are frequently run to these and other places in the neighbourhood likely to interest a photographer.

There are a great many photographic dealers and chemists in the city, most of whom provide dark rooms. Amongst the many may be mentioned H. Hodder and Co., 11 and 12, Wine Street, and M. W. Dunscombe, Ltd., 5 and 7, St. Augustine's Parade.

LOOE.

The writer would be glad of information concerning Looe.—C.S.W.

The two towns of East and West Looe are picturesquely built on the sides of hills some 350ft. high, sloping abruptly to the water level of the estuary of two small rivers which unite just above the modern bridge connecting the two towns. This estuary between

the bridge and the sea forms a tidal harbour, with quays, warehouses, stores, etc., and generally shelters some trading schooners, ketches, and occasionally a steamer, with their usual foreground figures and accessories.

The fishing fleet of fifty or sixty luggers, with tan and other coloured sails, either entering the harbour or leaving it for the fishing grounds, is always a favourite subject for the camera or canvas. There are some quaint old houses and narrow streets in the ancient part of East Looe, and these and other old-time relics, such as the pillory outside the old Guildhall, form good subjects for anyone with a wide-angle lens.

The coast line, though not so bold as that of the North coast, is very fine; and the landscape scenery—rapid streams, woodlands, fern-covered bridges and walls, lichen-roofed cottages—to be found in the deep river-valleys running inland from the sea, is most picturesque.

There are some fine old churches in the immediate neighbourhood—St. Martin's-by-Looe, Duloe, Tolland (with good carved bench-ends), Lanreath (fine old rood-screen, still showing original paintings), whilst still further afield, but within easy cycle ride, are Liskeard (fine church, with parvise, rood-loft stairs, a so-called leper's window, consecration crosses, etc.), St. Neot (very fine early sixteenth century windows), set in splendid scenery, and St. German's, the ancient cathedral of the old East Cornwall see.

The neighbourhood of Liskeard (nine miles from Looe by train—Liskeard and Looe Railway) abounds in objects of antiquarian interest. Druidical circles are to be found near the celebrated Cheesewring (a curious geological formation showing the intrusive nature of granite) and at Duloe. Old Cornish crosses are seen at St. Neot, near St. Pinnock, at Liskeard, and on the Caradon moors; British encampments and tumuli are still in evidence near Looe.

Except in the month of August lodgings are easily obtainable. The towns are healthy, the bathing safe, and the fishing is good. Rowing and sailing boats can be hired, and the boatmen are a civil and obliging lot of men. The excursion steamers of the G.W.R. give opportunities for visits to Plymouth, Fowey, and Falmouth. The Eddystone can also be visited from these steamers, while Polperro—beloved of artists—is within a walk. Mr. W. Keast, Fore Street, East Looe (dark room), keeps a supply of plates, papers, and chemicals. All the express trains from London stop at Liskeard (G.W.R.) The Liskeard and Looe railway station adjoins that of the G.W.R.—A. E. HURFORD, M.A.

ILFRACOMBE.

I shall be glad of any photographic information you can give me concerning Ilfracombe.—H. COE.

Ilfracombe is a deservedly popular Devonshire town, occupying a beautiful position on the shores of the Bristol Channel. It is easily reached by rail, being served by both the London and South Western and Great Western Railways, the latter also putting it in touch, *via* Taunton and Bristol, with

the Midlands and North. There is ample accommodation for visitors, from palatial hotels to cheap, but comfortable, private apartments and boarding houses.

In Ilfracombe and the near neighbourhood there is plenty to occupy the camera. The sea views from the Tors Walk, Lantern, and Capstone Hills should all be visited, and the rock-bound coast is very picturesque. White Pebble Bay, Lee (2½ m.) and Slade Valley form a delightful morning's ramble. Morthoe (2 m.) can be reached by rail, but it is better to walk through the pleasant footpaths, visiting the Ball Point Lighthouse on the way. At Morthoe is a fine old church, with the tomb of William de Tracey, A.D. 1322, whom, the guide book tells us, we must not confound with the Tracey who helped to slay Thomas à Becket. Barracane and Wollacombe Bays are near Morthoe, and on no account should the visit to the magnificent rocky promontory known as Morte Point be missed.

But, beside the many walks which may be taken from Ilfracombe, there are liberal services of steamers and coaches. Bristol and Swansea enjoy a regular service, and, in addition, there are daily excursions in the summer time to Lynton and Lynmouth, Minehead, Tenby, Clovelly, Lundy Island, etc. Inland, the coaches take us across the magnificent Devonshire moorlands, Combe Martin, Barnstaple and Lynton are all accessible by coach, and at least some of the time at Ilfracombe should be occupied in seeing the surrounding country in this manner.

There are several shops where apparatus and material can be obtained, and a dark room will be found at the establishment of Mr. E. D. Percival, 5, High Street, Ilfracombe.



A Powerful Developer.

The following formula is given in "Camera Craft" as being a very powerful developer. We quote it for what it is worth, but it would be most likely to have a fogging effect on any but the very cleanest and slowest of plates.

Sodium sulphite	...	100 grains
Amidol	...	50 grains
Caustic soda	...	10 grains
Distilled water	...	20 ounces

Colouring Lantern Slides.

The following treatment is said by the "Photographische Rundschau" to allow colour to flow properly on the gelatine film of a lantern slide. The slides are first placed in a two per cent. solution of formaline, rinsed for a moment and dried. After drying they are flowed over with the white of an egg, to which two drops of liquor ammonia have been added, well beat up and filtered. The colours are mixed up with a little weak gum arabic solution.

Some Snap Shot Failures.

AN ARTICLE FOR BEGINNERS.

By E. HUGHES.

Special to "Photography and Focus."



AMONGST the negatives of every hand camera worker will be found many which depict scenes we should very much like to have in the form of prints, but which for some technical reason are not printable. They are records of the troubles which beset the snap-shooter, and, if they serve no other useful purpose, may at least be employed as examples of what not to do.

One of the commonest of these is a general fuzziness over the whole picture, which is brought about by shaking the camera, at the moment of pressing the button. There are many workers who can hold a camera perfectly still so long as they are merely looking at the picture in the finder, but as soon as they go to make an exposure they jerk the camera, and the result is a blurred picture. This is exactly paralleled in shooting, where many a poor shot fails because in pulling the trigger he pulls the whole gun at the same time.

A little practice at releasing the shutter will prevent this, and every hand camera user who finds a tendency to shake the camera at the moment of exposure should have that practice. The thing to remember is that the button or release has only to be pressed *relatively* to the camera. In other words, the camera should be so held that, while the finger that is on the button pushes it one way, the other fingers pull the camera against that push. If someone were to hold a hand camera and let a second person put a finger on the button and press it, without touching the camera in any other way at all, the result would show movement almost to a certainty, for the simple reason that the counteracting pull, of which I have just written, would not be given. It is not possible to lay

down precise rules for holding the camera, because the method of doing so must depend upon the particular instrument that is used, and the position of the shutter release; but if it is borne in mind that it must be so held that the pressure on the button may be counteracted by a pull with the other fingers of the same hand, there should be no difficulty in finding out the best way of holding it.

Some beginners who purchase a hand or stand camera fitted with a ball and tube release employ this when holding the camera in the hand. This should not be done, but the pneumatic release kept for use when the camera is on the stand. There is much less risk of jerking the camera by pressing a button than by squeezing a ball.

Movement of the camera blurs the whole picture, and is therefore easily distinguished from incorrect focussing, which may, indeed, blur the whole, but which is much more likely to blur some parts and to leave others very sharp. Those who use fixed focus cameras may think that a blurred picture cannot be due to bad focussing, but this is not quite the case. A fixed focus camera gives us everything sharp that is not nearer to the camera than a certain distance, and if such a camera is used to photograph anything nearer than that distance, those things will be blurred, because they will be out of focus. Users of fixed focus cameras, therefore, should learn how far a thing must be from the camera to appear sharp on the plate, and see that anything they photograph is at least that distance away. A single exposure on a suitable subject will give that information. If the lens has several stops, the distance should be ascertained for each of the stops, as the smaller the stop used, the nearer the subject may be to the camera and still be sharp.

With cameras provided with a focussing arrangement, a want of sharpness may be due to an incorrect judgment of the distance. This, too, is something that can only be mastered by practice; and it is much cheaper to do the practising without exposing plates than when actually



After Rain.

By Edwin Marks.

photographing. When out walking, one can estimate the distance of different objects as quickly as possible and then pace it out to see how nearly correct was the estimate. A very few trials of this kind will have a wonderful effect on the accuracy with which one judges distance, and are no trouble whatever. As a general rule there is no need to do it with any distances greater than about fifteen yards, as beyond this most hand cameras give everything in focus.

The same kind of want of sharpness may be due not to bad focussing, but to a bad lens. If the negatives persistently show poor definition towards the edges of the plate, but good or fairly good definition at the centre, it may be put down to a poor lens. It will not do to judge the lens from one or two negatives only, because this blurring may be caused by the different parts of the subject being at different distances from the camera, and so not all brought to a focus at the same time. But if it constantly happens, the lens is at fault; though the definition can be improved even then by using a smaller stop.

We must learn the capabilities of our lens in this direction. The nearer the subject is to the camera, the more difficult it is to get everything sharp without stopping down, no matter how carefully we focus. A lens which at full aperture will give us everything sharp in most of the landscapes for which it is used, may want quite a lot of stopping down when it is employed to take a portrait where the sitter's face and knees are both to be critically sharp at the same time. The larger the stop, the more careful must be the focussing. I have known an amateur prefer an old rectilinear lens which would not work at a bigger opening than $f/16$ to a modern $f/7$ anastigmat, on the ground that the rectilinear gave him much better definition. As a matter of fact, even at full aperture the anastigmat was far superior in definition to the rectilinear; but to get that definition it had got to be carefully focussed, whereas the rectilinear at $f/16$ was almost like a "fixed focus" apparatus, and wanted hardly any focussing at all.

Besides poor definition, hand camera negatives are often useless because the subject is not quite on the plate, or something which we did not notice at the time has got in the field of view and spoilt the picture. A whole series of river pictures taken from a steamer were spoilt by a little fluttering pennon carried on the bows of the boat, which managed to get itself into nearly every one. The finder was suspected of being at fault, and was carefully examined, but proved to be correct, and there is no doubt that the little flag, which was a very tiny object on the finder, was simply overlooked. When using small finders, therefore, it is well to supplement

the finder by a good direct look at the subject, particularly with a view to see that there is no risk of such objects getting in the way.

Even if a finder is correctly fixed, something may get in the way of the picture and yet not show in the finder. This is the case with very near objects, as, however accurate a finder, it begins to be incorrect as the subject gets nearer and nearer to the camera. This is inevitable, since the camera lens and the finder lens, except in reflector cameras, cannot be in the same place. It can be illustrated by putting something close up to the camera lens and obscuring it entirely, which can easily be done without interfering in any way with the view as seen in the finder.

Disappointment sometimes results from another cause. The

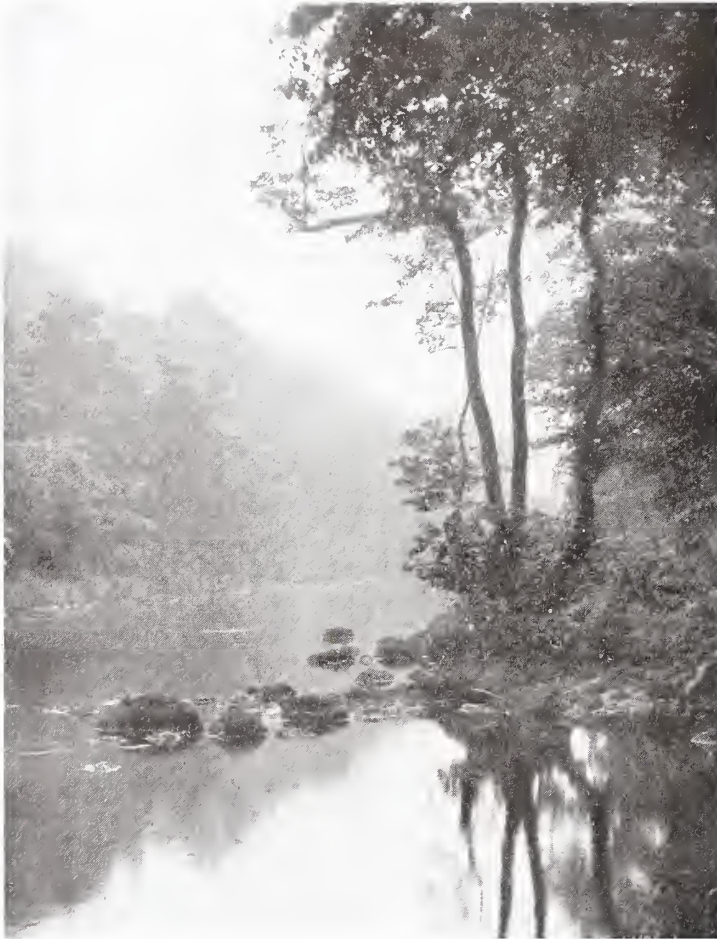
eye level is some five feet or more from the ground, whereas a hand camera is usually held at a height of about three feet only. A view may seem all right to the eye from its more lofty standpoint, but be quite different and disappointing from the standpoint of the camera lens, although, owing to the small scale on which the picture is seen in the finder, the difference may not be noticed. This might have been discovered by stooping for a moment before making the exposure.

A very frequent snap shot trouble is the presence of figures which we never intended to include, and overlooked altogether at the time of making the exposure. This, again, is to be attributed very largely to the small size of the picture in the finder, and when the amateur is photographing where there are many people about, a sharp look-out should be kept for such intruders. They may only appear as the merest specks in the finder, yet the shutter may catch them in some altogether unnatural-looking attitude, and in the print the

grotesque positions, even if the figures are very small, may attract attention away from everything else.

There is one other fault I can refer to. It is most likely to be met with in cameras of the folding—hand or stand—type. The bottom of the negative is sharp and the top fuzzy, or *vice versa*. It is caused by the front being rickety and loose, so that when the release of the shutter is pressed, it throws the front out of parallelism with the back, and so tips the lens on one side. When the lens is a very good large-aperture one, this may quite neutralise its excellence.

Such are a few of the reasons why all our hand camera negatives cannot be used for printing. They are certain to be met with at one time or another, but by being forewarned the reader will be on his guard, and the result, I trust, will be that they will at least be much more seldom found figuring in his results.



On the Wharfe, Bolton.

By Herbert B. Smith

Awarded a Certificate in the Special Subject Competition, June.

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The
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in
Excellence.



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the qualities
most essential
for successful
holiday negatives.

Imperial Plates



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Telegrams: "Cyclist, London." Telephone: 5610
and 5611, Holborn.

PUBLISHING DATE.—PHOTOGRAPHY AND
Focus is on sale throughout the United Kingdom
every Tuesday morning.

SUBSCRIPTION.—PHOTOGRAPHY AND Focus
will be forwarded regularly at the following rates
GREAT BRITAIN. ABROAD.

	s.	d.		s.	d.
Twelve Months ..	6	6	Twelve Months ..	10	10
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Single Copy	1	1	Single Copy	2	1

REMITTANCES.—Postal Orders, Cheques, etc.,
should be crossed and made payable to Iliffe
and Sons Limited.

ADVERTISEMENTS.—All communications on
advertisement matters should be addressed—
The Advertisement Manager, PHOTOGRAPHY AND
Focus, 20, Tudor Street, London, E.C. All copy
for displayed advertisements for the issue of any
particular week must reach Tudor Street by the
first post on Monday morning in the week previous.

PREPAID ADVERTISEMENTS.

SALE AND EXCHANGE (for Amateurs only).
—1d. per word, minimum 6d.

PROFESSIONAL AND TRADE.—Three words
2d., minimum 1/-.

All advertisements to be inserted on these
terms must be accompanied with remittance.
To ensure insertion, letters should be posted in
time to reach the offices, 20, Tudor Street, E.C.,
not later than first post on Wednesday.

BOX NUMBER.—For the convenience of
advertisers, letters may be addressed to numbers
at the office of the paper. When this is desired,
2d. will be charged for registration, and three
stamped and addressed envelopes must be sent
for forwarding replies. Only the number will
appear in the advertisement. Replies should be
addressed, "No. 000, c/o PHOTOGRAPHY AND
Focus, 20, Tudor Street, London, E.C."

DEPOSIT SYSTEM.—Persons who hesitate to
send money to unknown persons may deal in
perfect safety by availing themselves of our
Deposit System. If the money be deposited with
PHOTOGRAPHY AND Focus both parties are advised
of this receipt, and upon intimation of the arrival
and acceptance of the goods, the money is for-
warded, less a charge of 1/- for registration. The
time allowed for a decision after receipt of the
goods is three days. For all transactions exceeding
£10 in value, a deposit fee of 2s. 6d. is charged.
Cheques and money orders should be made payable
to the Proprietors, Messrs. Iliffe & Sons Limited,
and addressed to them at Coventry.

PUBLISHING NOTICE.—Communications for
the Publishers should be addressed, Iliffe & Sons
Limited, 20, Tudor Street, London, E.C.

EDITORIAL NOTICES.

ADDRESS.—All communications for the Editor
should be addressed: The Editor, PHOTOGRAPHY
AND Focus, 20, Tudor Street, London, E.C.

TO CONTRIBUTORS.—The Editor will be glad
to consider original up-to-date manuscripts on
photographic subjects. All contributions must
be typewritten, or in very legible handwriting,
on one side of the paper only, and should bear
the name and address of the sender. Letters or
communications arising out of matters already
appearing in the paper are not paid for. The
Editor disclaims legal responsibility for the
safety of matter submitted to him, but he will
endeavour to return rejected manuscripts, etc.,
when a stamped addressed envelope is enclosed
for that purpose. No notice whatever can be
paid to communications without the name and
address of the sender, not necessarily for publi-
cation.

PRINTS FOR CRITICISM.—Readers sending
prints for criticism or advice are notified that
in all cases it is understood that by so doing
permission is given for their reproduction, without
fee, in PHOTOGRAPHY AND Focus.

PRINTS FOR REPRODUCTION.—Reproduction
fees are only paid by arrangement beforehand.
The sending of a print, without any condition
stated, will be taken as permission to reproduce
it without fee. The Editor will be glad to consider
for publication, with or without letterpress, photo-
graphs of special interest, on terms to be arranged.

PAYMENTS.—Articles and illustrations are paid
for on acceptance.

INTERVIEWS.—The Editor will be at 20,
Tudor Street, on Wednesdays, between the hours
of 9.30 and 11.30 a.m., but can only be seen at
other times by appointment.



AUTOCHROME INSTRUCTIONS. The
Lumière N.A. Co., of 89, Great Russell
Street, London, W.C., has issued the
latest instructions for working Auto-
chrome plates in leaflet form. We
should advise all of our readers who are
using Autochrome plates, or are inter-
ested in their manipulation, to apply
for a copy.

MR. G. ALBERT SMITH, of the
Laboratory, Roman Crescent, South-
wick, near Brighton, writes with refer-
ence to our report of his demonstration
of cinematograph pictures in colour to
point out that the omission to describe
the method by which they were
obtained was not from design. There
were a large number of pictures to
show, and the modus operandi had been
previously given in *Photography and
Focus* at the time of the first exhibi-
tion of such pictures.

Books for . . . Photographers.

Photography for All.

By W. JEROME HARRISON, F.C.S.
Covers the whole ground of photography
as practised in its most popular forms.
Cloth Bound 1/- nett. Post free 1/2.

Practical Slide Making.

By G. T. HARRIS, F.R.P.S.
All the different processes described at
first hand by a practical slide maker.
Cloth Bound, Price 1/- nett. Post free 1/2.

The Hand Camera and what to do with it.

By W. L. F. WASTELL AND R. CHILD
BAYLEY.
Dealing with modern hand cameras of all
types and giving instructions for all forms
of photographic work involving the use of
a hand camera.

Cloth Bound 1/- nett. Post free 1/2.

The Platinotype Process.

By W. J. WARREN.
A complete, practical, concise and well
written treatise on what is the finest of the
printing methods of pure photography,
with facsimile developed and undeveloped
platinum print.

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Practical Enlarging.

(Sixth Edition.) By JOHN H. HODGES,
F.R.P.S.
To hand camera workers and the users of
small cameras generally the book will be
found invaluable.

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A full list sent on receipt of a postcard.
ILIFFE & SONS LTD.,
20, TUDOR ST., LONDON, E.C.

THE BEAUTIES OF TUNBRIDGE WELLS
are excellently described and illustrated
in a sixpenny guide just issued by the
Tunbridge Wells Tradesmen's Associa-
tion.

THE WATFORD CAMERA CLUB holds
its annual exhibition on October 28th
and 29th. There are four open classes.
Further information can be obtained
from the honorary secretary, 100, High
Street, Watford.

THE BUSCH SELLAR FINDER. Messrs.
Houghton's, Ltd., of 88 and 89, High
Holborn, London, W.C., have the con-
trol of this finder, recently reviewed in
our columns, and all communications
with reference to it should be addressed
to them.

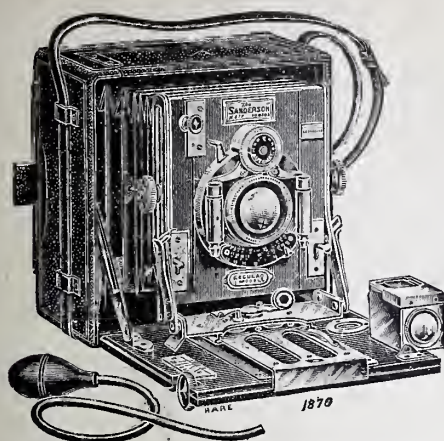
A TRIUMPH INDEED. "It is some-
what of a triumph," writes "Camera,"
in the "Glasgow Evening Times,"
"when an over-exposed plate, all right
in every other respect, is saved by
careful development." It must always
be a triumph to achieve the impossible.

WHEN TAKING PHOTOGRAPHS of coins,
medals, etc., in consequence of their
colour and of reflections from their
more prominent parts, it is usual not
to photograph the coins themselves,
but plaster casts from them. A little
burnt umber should be sifted with the
plaster so as to take off its extreme
whiteness, and the colouring matter
may be added in proportion to the
colour of the metal of the original coin.

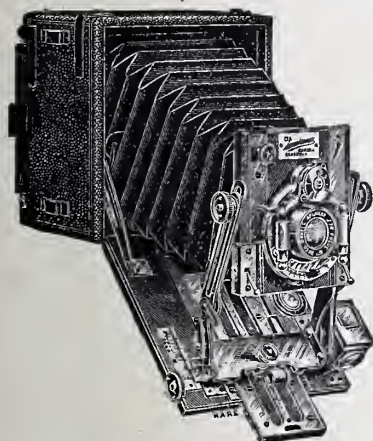
ILLUSTRATED GUIDES. The St.
Catherine Press, Ltd., has just pub-
lished for the respective local councils
official guides of Holyhead, Frinton-on-
Sea, Lanark, and Peebles. These can
be obtained post free on application to
the Town Clerk of the particular place
dealt with.

KEEPING CARBON TISSUE. Accord-
ing to Dr. Hauberisser, a well-known
German authority, sensitised carbon
tissue if kept in a vessel containing
moist ammonia vapour will remain in
good condition for weeks. If, instead
of ammonia vapour, lumps of
ammonium carbonate are placed in the
vessel, the tissue remains soluble in
warm water, but it loses its sensitiv-
eness to light. This can be restored,
however, if it is pinned up in the dark-
room for a few hours.

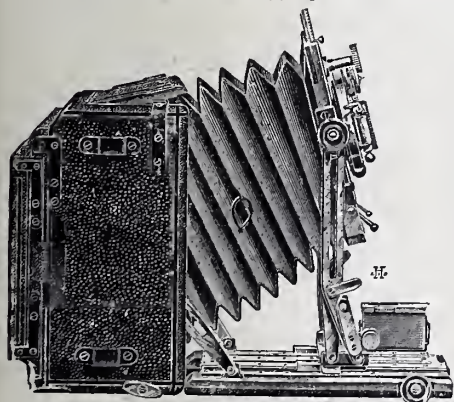
A HUGE COLLECTION OF FORMULÆ
tables and recipes for all photographic
and photo mechanical processes was
compiled a good many years ago by Dr.
Eder. Eder's "Rezepte und Tabellen"
has long been a standard work of re-
ference both in Germany and beyond
its boundaries, and its usefulness has
been increased by the careful way in
which each edition has been brought
up to date. The seventh has just made
its appearance. The publisher is Wil-
helm Knapp, of Halle a. S., and the
price 3 marks.



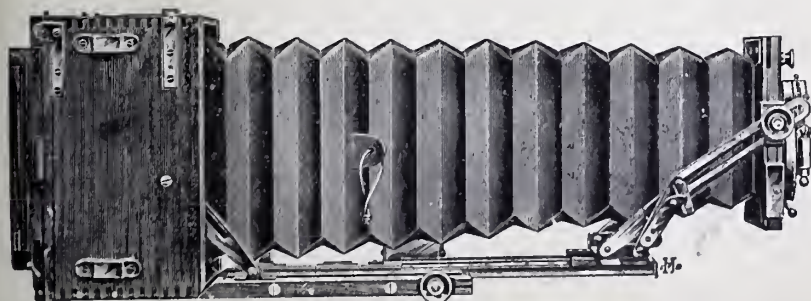
This is a Sanderson with the Lens in the normal position.



Here the Lens has been dropped by means of the Sanderson Front, to get an excess of foreground.



The Lens can be raised by the Sanderson Front to give an excess of sky.



Pictures may be doubled in size by extending the Sanderson Front and removing the front part of the Lens.

Why the "Sanderson" is so very much better than other Cameras.

The Sanderson Universal Front is a patent, or rather a series of patents, any one of which would be useless without all the others. The Sanderson Front is called Universal because it rises, falls, recedes, extends, or **swings in a perfect arc at the will of the operator.** Yet it can be locked rigidly and instantly in any position.

Then, again, the Lens is swung on its axis, and the locking nuts that control its movements are fitted at the end of the axial pins.

Each of the swinging Arms that carry the Lens front have one single slot that goes through in their entire length, and in these slots the axial supports of the Lens can pass freely up or down, backwards or forwards, **always preserving its balance, and ready to be locked rigidly in any position by a single touch.** All these wonderfully simple movements are patented.

The great point to remember is that in buying a Sanderson you are getting the finest, most famous, and most useful Camera that the world produces.

You are buying a most beautifully made Camera, one that will serve you well and can always be absolutely depended upon. You are buying a Camera with a reputation that is above reproach.

There are Field Cameras and Hand Cameras in the Sanderson series, and the prices range from

£4 4s. to £31 12s. 6d.

Call at any good Photographic Dealers and ask to see a "Sanderson."

Write for a booklet (stating whether you want a Hand or Field pattern) to the manufacturers:

HOUGHTONS

The largest manufacturers
of Cameras in the Kingdom,

**88/89, HIGH HOLBORN,
LONDON, W.C.**

PLEASE MENTION "PHOTOGRAPHY" WHEN CORRESPONDING WITH ADVERTISERS.



BEGINNERS' COMPETITION.

Open to all photographers who have never taken an award.

PRIZES.

First Prize.—A signed copy of "The Complete Photographer," a half-guinea work by Mr. Child Bayley, now in its second edition.

Second Prize.—A free subscription to *Photography and Focus* for twelve months.

One or more certificates of honourable mention will also be awarded.

RULES.

(1) Each competitor can send as many prints as he likes, but each print must bear on the back the coupon, published each week, the name and address of the sender, the title of the picture, and no other writing whatsoever.

(2) No print will be eligible that is larger than 5 in. x 3 in. (postcard size) or 5 in. x 4 in.

(3) No print must be mounted.

(4) No handwork other than simple spotting is permitted on negative or print, nor shading or dodging of any kind. It is distinctly understood that entry in the competition implies a declaration by the competitor that this rule has been complied with; and in case of dispute the editor shall have the right to call for the negative, from which the entry purports to be a simple direct contact print.

(5) No prints will be returned, and no correspondence with regard to the competition can be undertaken.

(6) The publishers of *Photography and Focus* shall have the right to reproduce, without payment, any of the prints sent in, winning or otherwise. But except the winning prints, the names of competitors of other prints that may be reproduced will not be published without the competitor's consent.

(7) All entries must be addressed "Beginners' Competition," the Editor of *Photography and Focus*, 20, Tudor Street, London, E.C., and must be delivered at that address by the first post on the closing date at the very latest.

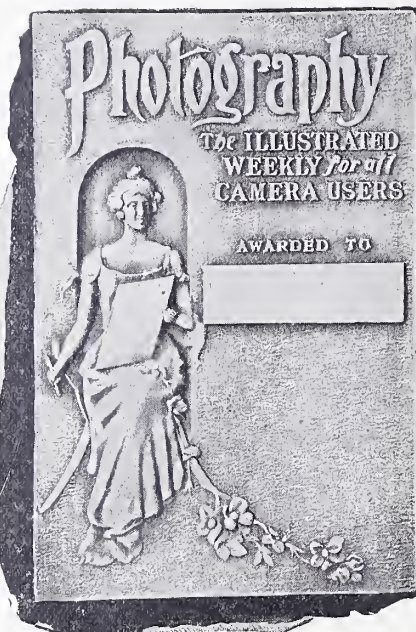
CLOSING DATE.—Monday, August 31st.

SLIDE COMPETITION.

Full particulars of the annual lantern slide competition, entries for which close on Monday, October 19th, will be found upon page 315 this week.



"Photography" Medal. Actual size.



"Photography" Plaque. Actual size.
Weight in silver over three ounces.

ADVANCED WORKERS' PRINT COMPETITION.

PRIZES.

First.—"Photography" Silver Plaque.

Second.—"Photography" Bronze Plaque.

Third.—"Photography" Bronze Medal.

One or more certificates of honourable mention will also be awarded.

RULES.

(1) All photographs must be sent addressed "Advanced Competition," the Editor of *Photography and Focus*, 20, Tudor Street, London, E.C., postage paid, to reach there not later than the first post on the closing date, and must contain a stamped addressed envelope or label (not loose stamps) if they are to be returned.

(2) Each photograph must be mounted, but not framed. Prints in slip-in mounts are not eligible. Each must bear on the back the name and address of the sender and the title of the picture. No letters or other communications must be enclosed with the prints. Every print must bear attached to its mount a coupon for the competition of the month, which will be found in each issue of the paper.

(3) Each photograph must be the work of the competitor as regards selection and arrangement of the subject, exposure and development of the negative, and printing, development or toning, and mounting of the print.

(4) The prints which are accompanied by stamped envelopes or labels will be criticised by post, and the editor shall have the right to reproduce any of the prints, winning or otherwise. The awards will be made a fortnight after the closing date.

(5) Awards may be increased or withheld at the absolute discretion of the judge, and in all cases of dispute the decision of the editor will be final.

(6) There is no restriction as to the eligibility, except as set forth in these rules, and except that the same negative must not be used more than once in the competition. That is to say, that a print from it once submitted, all further prints, however varied, are ineligible.

(7) Neither editor nor publishers of *Photography and Focus* shall be held in any way responsible for the safety of prints, or for their return to the competitors.

(8) The sending of a print to the competition will be regarded as a declaration to the effect that it is eligible under these rules, and that the competitor agrees thereto.

CLOSING DATE.—Monday, August 31st.

SPECIAL SUBJECT COMPETITIONS. OPEN TO ALL READERS.

PRIZES.

First Prize.—"Photography" Plaque in Silver.

Second Prize.—"Photography" Plaque in Bronze.

Third Prize.—"Photography" Medal in Bronze.

One or more certificates will also be awarded.

RULES.

(1) The subject of each photograph entered must be that announced for the particular competition.

(2) Each competitor can send as many prints as he likes, but each print must bear on the back the name and address of the sender, the title of the picture, and no other writing whatsoever. Each print must have attached to it a coupon for the competition of the month, which will be found in each issue of the paper.

(3) No print must be mounted. No handwork other than simple spotting is permitted on negative or print, nor shading or dodging of any kind. It is distinctly understood that entry in the competition implies a declaration by the competitor that this rule has been complied with; and in case of dispute the editor shall have

the right to call for the original negative, from which the entry purports to be a simple direct contact print.

(4) No prints will be returned, and no correspondence with regard to the competition can be undertaken.

(5) The publishers of *Photography and Focus* shall have the right to reproduce, without payment, any of the prints sent in, winning or otherwise. But except the winning prints, the names of the senders of other prints that may be reproduced will not be published without the sender's consent.

(6) All entries must be addressed "Special Subject Competition," the Editor of *Photography and Focus*, 20, Tudor Street, London, E.C., and must be delivered at that address by the first post on the closing date at the very latest.

SUBJECTS AND CLOSING DATES

A Harvest Scene. Closes Monday August 31st

A Seaside Scene. Closes Wednesday, September 30th.

A Portrait of a Lady. Closes Saturday, October 31st.



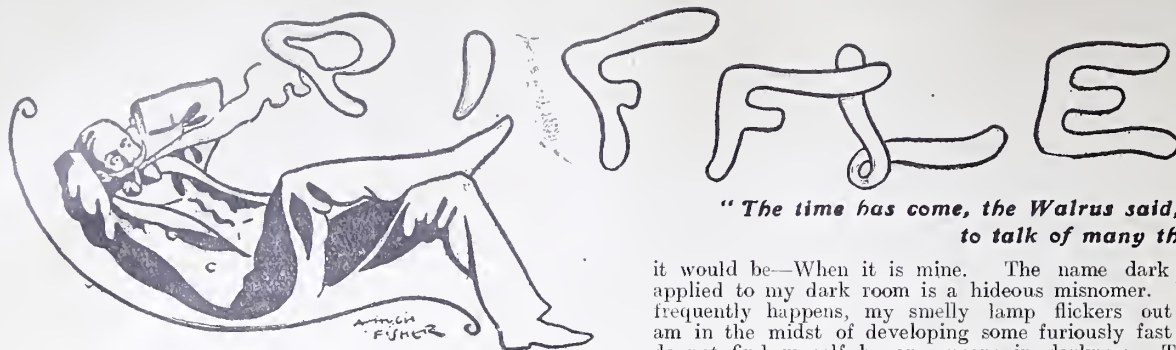
GEM
PLATES
ARE THE
STEPPING STONES *TO* SUCCESS

METEOR . . . 270H.&D. *FOR GENERAL AND SNAPSHOT WORK.*
SALON . . . 400H.&D. *FOR ULTRA RAPID AND SPECIAL WORK.*
ISOCHROMATIC 240H.&D. *A USEFUL ALL-ROUND PLATE.*

GEM P.O.P. & POSTCARDS.

BUY THROUGH YOUR USUAL DEALER; STIPULATE GEM
GEM DRY PLATE CO., LTD., CRICKLEWOOD, LONDON, N.W.

ERN. LIVEN. 08



"The time has come, the Walrus said,
to talk of many things."

ALL sorts of things are done nowadays to make the practice of photography more seductive. Persons who have hitherto led comparatively blameless lives are yielding to the temptation of turning the handle of a developing machine, or of making a print by means of a shaving brush and a blob of tar. The old-fashioned routine has lost what little charm it possessed, and novelty is the watchword of the day. This was forcibly brought home to me lately by a letter accompanying some samples of chemical preparations. The little packages were to be opened by pulling a tape, and the letter said, "One pull of the tape has proved such a tempting phrase that many amateurs, we believe, purchase these little tape machines for pure love of pulling the tape, the photography side being quite a secondary consideration." This was an eye-opener. Surely something extraordinary must result from the pulling of the tape when people were willing to purchase chemicals simply for the purpose of opening the packets regardless of any subsequent utility of the contents for photographic purposes.

* * *

Consequently, I felt justified in making a very special occasion of the opening of one of these packets. I gathered the family together, and invited one or two friends to come and witness the performance. Amidst a general feeling of suspense that was almost painful in its intensity, and wrapped round by a solemn silence, I tremulously pulled the tape. It would be wrong to say that nothing happened, because, as a matter of fact, the package came in two. But it must be confessed that this result hardly came up to our expectations. It was not spectacular enough. Moreover, the rending of the package made a hopeless hash of the directions printed outside. Some interest, however, was aroused by my efforts to open the contained papers of chemicals, and considerable admiration was expressed at the variety and originality of the language with which my attempts were accompanied. Each chemical had been wrapped up into a parcel which was dipped bodily in melted wax. There is a good opportunity for skill in opening such a packet.

* * *

It is with pardonable pride that I announce that my perseverance ultimately resulted in the production of a solution which I believed to be an amidol developer. It proved to be such in the main, but I took the precaution before using it to filter out the pieces of paper and tinfoil, the matches, tobacco ash, hairpins, and paraffin wax, all of which I concluded would not play a useful part in the production of bromide prints. It is wonderful testimony to the extraordinary excellence of the developer that I produced with it some prints from my own negatives sufficiently superb to be accepted by an editor on a foreign strand. A developer that will turn out prints from such negatives as mine is well worth buying apart from the excitement of pulling the tape. At the same time, I admit that I may not have produced the proper effect by my tape pulling. Some people are not good at that sort of thing. They will pull a Christmas cracker without making any pop at all, and without making anything fly into either their own or other people's eyes. Perhaps if I had pulled that tape properly there might have resulted a pyrotechnic display well worth the money, or a live rabbit, or the flags of all nations might have popped out. I have got some more packets, and I will pull the tapes and see if I get any better results. But I shan't ask any friends this time to see the show.

* * *

When is a dark room not a dark room? This is not a foolish riddle, but a serious question. One true answer to

it would be—When it is mine. The name dark room as applied to my dark room is a hideous misnomer. When, as frequently happens, my smelly lamp flickers out while I am in the midst of developing some furiously fast plates, I do not find myself by any means in darkness. There is a sort of twilight in the room, certainly, but I find no difficulty in reading the maker's name on the mangle, or in distinguishing the individual filaments in the spider's webs on my chemical shelves. You will say that this accounts for my plates being fogged. Perhaps it does. But they are not fogged. It is only the crude beginner who finds a light-proof dark room a necessity, and I am open to bet that I will develop a plate, and get a good negative, too, in broad daylight. I won't use a tank, or anything of that sort, but will keep the plate exposed to light all the time. Is it a bet?

* * *

To show how far short a room falls of being lightproof, I beg to refer to an experiment which will be received with incredulity only by the ignorant. I believe it implicitly. I have been to the Franco-British exhibition, and am henceforth able to believe anything. A gentleman blocked up the window of a room to see to what extent he could shut out strong sunlight. He did not do as you or I might have done, that is, hang up a threadbare and moth-eaten old curtain. He used solid inch boards covered with several layers of thick brown paper. Then he sat down and waited. The darkness was so thick that he could make holes in it with a Bradawl. But before long matters began to undergo a change. There was a faint suspicion of light; then he found he could see across the room; then he could see the luminous window through the papered inch boards; and at last he could see the shadow of a person outside through the brick wall itself. There is no suggestion that the brick wall was less substantial than the inch boards, yet the sunlight showed through it, and it says a great deal for the substantial nature of the man outside that he cast a shadow where a brick wall did not.

* * *

In spite of the conclusions to be drawn from this experiment as to the penetrative power of sunlight, we foolishly continue to protect our most sensitive plates by nothing more substantial than the flimsy wood of a dark (?) slide, the thin leather (?) of camera bellows, or the opaque (?) cardboard of a plate box. It cannot be said either that we do not expose plates with this feebly inadequate protection to full sunlight. Everyone knows that the photographic chemist and dealer always chooses the most sunny section of his front window for stacking up piles of plates and sensitive paper. He frequently further concentrates the light by means of magnifying glasses or bottles of solution. The only explanation I can suggest as to why the plates are not hopelessly light-struck is that they are protected for part of the time by the shadows of substantial passers-by. Or, perhaps after all, a brick wall is more transparent than a plate box.

THE WALRUS.

SUBSCRIPTIONS.

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PHOTOGRAPHY. AUGUST 25TH, 1908.

PHOTOGRAPHY

A JOURNAL FOR EVERY CAMERA USER.

EDITED BY R. CHILD BAYLEY.

PUBLISHED WEEKLY.

AUGUST 25TH, 1908. TUESDAY. No. 1,033. VOL. XXVI.



THE DESERTED MILL.

BY HARRY LINDOE.

Awarded the Bronze Plaque in the Advanced Workers' Competition, July, 1908.



EDITORIAL

The Monthly Competitions.

May we remind our readers that on next Monday, August 31st, both the beginners' and the advanced workers' competitions for August will close, as also will the "Harvest Scene" special subject competition. Full particulars of these will be found on page 335 this week. We are glad to hear that the recipients of the *Photography* plaque are highly pleased with its beauty. The design is a very handsome one, and we are bound to admit that the reproduction on page 335 does not do justice to it. Quite apart from its beauty or intrinsic merit, there is the value which attaches to it as being won in open competition with skilful workers, whose standing is evinced by the pictures which are reproduced in our pages from time to time. We believe the healthy spirit of emulation which these competitions evoke is one of the most potent factors in improving the work of those who go in for them.

The Rising Front on Old Cameras

The leaderette which we published three weeks ago on buying old-fashioned stand cameras has aroused a good deal of interest, and has been quoted from and referred to by several writers on photographic topics. An interesting confirmation of our statement as to the difference between the extent of the rise provided a quarter of a century since and that provided now comes to hand from a well-known worker.

"I purchased a 15 by 12 camera about thirty years ago," he writes us in a letter recently. "It has a rise of 3in. and a fall of $2\frac{1}{4}$ in. The maker's name is Horne and Thornthwaite." Messrs. Horne and Thornthwaite were a very prominent firm in photography in those days, and the apparatus no doubt was quite a representative one; yet here is a 15 × 12 camera, with no more than 3in. rise. Since starting to write these lines we have measured the rise on a half-plate camera which we had at hand, and which may be regarded as typical of modern designs. It has a rise of $3\frac{1}{4}$ in. and a fall of $1\frac{1}{2}$ in. The fall is unimportant, the rise is the movement that is wanted, and we see that a greater rise is thought necessary for a $6\frac{1}{2} \times 4\frac{3}{4}$ camera to-day than was furnished thirty years ago on a 15 × 12. We might add that the camera we measured was not one of the Sanderson type, where a great degree of rise has been made a special feature; so that the case is actually stronger than it seems.

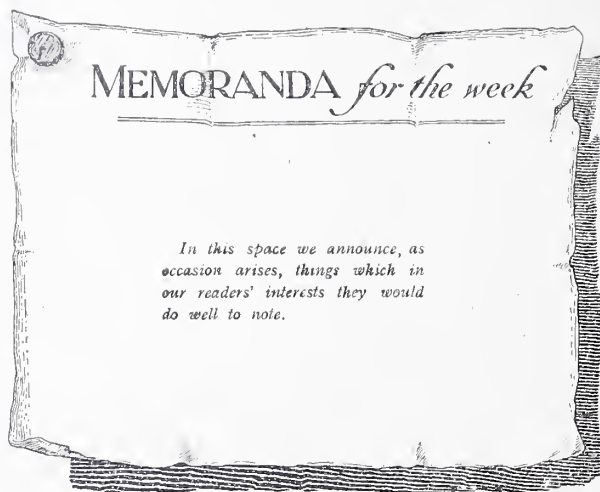
Two Incidents and a Moral.

Mr. Sutcliffe is always entertaining, and his weekly column in the "Yorkshire Post" has taken quite the first place both for entertainment and instruction amongst the photographic sections of the lay press. In the last issue he gives two little incidents—one from a reader asking for advice, and one from his own experiences. We will quote them first, and supply the moral afterwards. Here is one: The reader tried a new make of plate, "but this, instead of developing in the ordinary way, took a very long time to come up, and when it did come it only came in patches. The strangest part about it was that it absolutely refused

to fix, and after it had been in the hypo for two hours it was only fixed round the edges, and although I put it back into the hypo and left it there overnight, it was not completely fixed next morning. Strangest of all, there was hardly any image at all on the fixed parts, though the plate was fully exposed, and what surprised me more than anything was to find that there was glass on both sides of the film. The film of sensitive gelatine had evidently been enclosed in two pieces of glass instead of being

spread on one. I exposed another plate, and found it just the same."

The other incident is similar. Mr. Sutcliffe says: "I had lent my exposure meter to a stranger, who said he had come away from home without his; he said his wife had forgotten to pack it up with the camera—like a man, that. Having to photograph some flowers in a darkish room, I had my doubts whether the exposure should be ten or forty minutes. I therefore bought a shilling actinometer, and calculated that as soon as the paper was tinted to the depth of the surrounding tint the time would be up. I set up the meter, and took off the cap. After ten minutes the paper had not darkened in the least; evidently, I thought, the room is darker than I thought it was. After half an hour the paper had not changed in the least. I then thought there must be something wrong with the meter, so I put the cap on the lens and took the meter out of doors into the sunshine. The full sun had no effect on the paper. The next morning I took the meter back to the chemist, and asked him if he could tell me why it refused to do its duty. The chemist kindly explained that I had evidently forgotten to take out the dummy piece of white paper and replace it with one of the strips supplied with the meter. I am still puzzling my brain



'to try and find out why the maker of the meter fitted it with a dummy at all.'

The Moral.

Every one of us could cap these tales with others on similar lines and as authentic. Are they not due to the difficulty the expert has to put himself into the place of the beginner for whom he is catering. We continually get asked questions of this kind. "How stupid," says someone to whom we repeat one of these elementary enquiries. It is not stupid at all; perhaps it is the very opposite, and is actually based on an unusually intelligent deduction from insufficient premises. Unfamiliarity with a subject is not stupidity; and all of us know things of which some of the greatest of the world's thinkers have been ignorant. It would be well if all those who have to provide for the wants of the tyro would try and put themselves in his place, try and experience his difficulties, and, what is more, try to meet them. The kodak is a classical example of doing this successfully, and its maker has had his reward. There are plenty more prizes awaiting those who can do in their own way what George Eastman some twenty years ago did in his.

Free Samples.

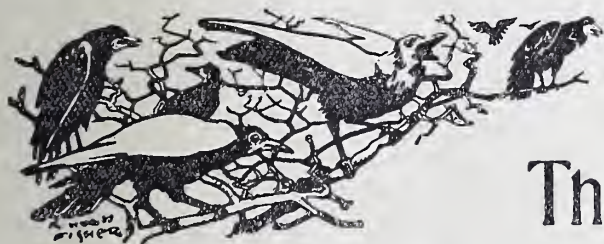
The Birmingham Photographic Co., whose offer of free samples was noted in our "Memoranda of the week" the other day, write us to say that, although *Photography and Focus* has not been published more than four days, they have had over two thousand applications from its readers. When it is remembered that dealing with these is all work that is over and above the ordinary routine of the company's business, it will be seen that to expect a sample packet by return of post is unreasonable, and to write an abusive letter because it does not turn up is still more unreasonable. Perhaps those who have not yet got their samples will note that the applications are being dealt with as rapidly as possible. The incident is a testimony to the way in which the readers of *Photography and Focus*

are learning the true function of "Memoranda." Each entry that appears there brings a larger response than the last; and we do not mean to rest until we have convinced not five per cent. but fifty that when we note an offer there, that offer is worth accepting.

Landscape Photography.

Two of our special articles this week deal with landscape photography. In that by Mr. Reid will be found quite a number of hints on the manipulation of the stand camera. Many of these, no doubt, will be familiar enough to older workers, but to those who have only taken up photography within the last few months they may be very helpful. There are quite a number of simple operations in photography which can be done in several different ways and are generally passed over in textbooks as if it is taken for granted that they will be done the right way. Take so simple a matter as the setting up of a tripod, for example. The old hand puts it up automatically with one leg pointing in the direction in which he proposes to use it; the beginner often just puts it up anyhow. Yet if he had once been shown how much more convenient was the arrangement referred to, he would not be likely to use any other in future. This is only a type of the hints throughout Mr. Reid's article.

In the other landscape article to which we have referred, Mr. Woods points out how easy it is, as a rule, to extemporise suitably dressed figures for landscape work. Examples of success in this direction have not been wanting at the exhibitions of the R.P.S. in recent years. For instance, "Will it mend?" Mr. Mummery's well-known picture, had as the model for its rustic figure a certain painter not unknown in photographic circles. This article might well be taken as the complement of Mr. S. J. Tayler's remarkable article in last week's issue, wherein he showed how far more elaborate costume effects could be extemporised.



The Week's Meetings.

MONDAY, AUGUST 24TH.

Southampton C.C. "Portraiture," N. R. Kay.
Bristol P.S. "Discussion on Winter Syllabus."

TUESDAY, AUGUST 25TH.

Darlington C.C. Outing Prints.
Nelson C.C. Print Evening.
Nelson P.S. Members' Private Social.
Batley & D.P.S. Keighley.

WEDNESDAY, AUGUST 26TH.

North Middlesex P.S. Short Papers. Mr. Hare and Mr. Rollings.
Birmingham P.S. The Lickey.
Rugby P.S. Lutterworth.
Levonport C.C. Pentliffe.

THURSDAY, AUGUST 27TH

Barrow-in-Furness Naturalists' Field Club. Haverthwaite.

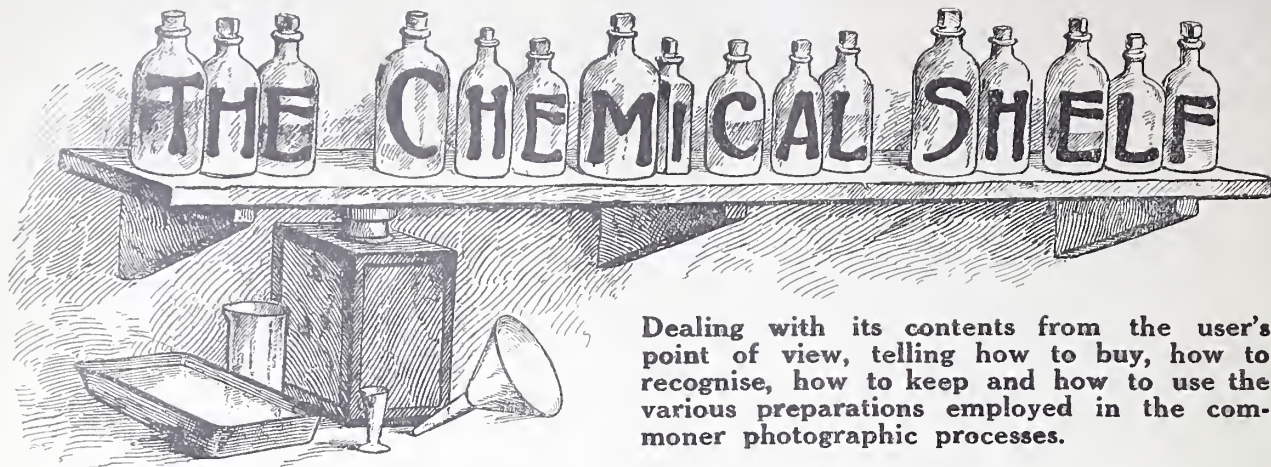
SATURDAY, AUGUST 29TH.

Nelson C.C. Foulridge.
Barrow-in-Furness Naturalists' Field Club. Footpath Ramble.
Nelson P.S. Thursden Valley.
Boro. Poly. P.S. Gornall and Shere.
Photo Art Club (Aberdeen). Kemnay.
Wallasey A.P.S. Shotwick.
Northamptonshire Natural History Society and Field Club. Castle Ashby.
Windsor P.S. Porthcawl.
Coventry P.C. Whitley and District.
Blackburn & D.C.C. Clipping, via Hurst Green.
Glasgow & W. of S. A.P.A. Eyemouth.
Bristol P.C. Bradford-on-Avon.
Glasgow Southern P.A. Cadder Woods.
Catford & Forest Hill P.S. Leigh.
Batley & D.P.S. Kirk Burton.
Preston C.C. Fleetwood.

MONDAY, AUGUST 31ST.

Bournville & D.P.S. Criticism Evening.

Societies will have their meetings announced here if the syllabus is sent to us at the beginning of the Session, or from time to time



METOL.

Metol is a white crystalline powder, which is specially made for photographic purposes, and is, therefore, not likely to be met with in an impure condition; at least, if it is purchased in the maker's bottles. It is freely soluble in water, keeps indefinitely in the dry state, and very well in solution if a preservative is present.

Metol is generally used in conjunction with hydrokinone. By itself it is a very rapid developer, causing the image to appear very quickly, but density to gather slowly. As hydrokinone is just the reverse, the two together are both rapid in bringing out the image and rapid in giving it density. The impression that metol by itself will not give density is not correct; given time enough, it will yield as much density as any developer.

Metol solutions should always be made up by dissolving the ingredients in the order given in the formula, seeing that

out into a kind of rash, with irritation and soreness. Metol may be used for years with impunity, and then this develop itself. It soon passes off, but is troublesome while it lasts; and, curiously enough, so far from rendering those attacked immune in the future, it leaves them predisposed to attack. When once the photographer has suffered from this "metol poisoning," as it is termed, there is nothing to do but to take some other developer in future. The least contact with metol will bring it on again.

FORMULÆ.

Metol-Soda for Negatives.

A.—Metol	...	...	75	grains
Sodium sulphite (crystals)	...	...	1½	ounces
Water	...	...	10	"
B.—Sodium carbonate (crystals)	...	...	1½	ounces
Potassium bromide	...	...	5	grains
Water	...	...	10	ounces

For use, equal parts of A, B, and water are taken.

Single Solution Metol Developer for Negatives.

Metol	...	...	75	grains
Sodium sulphite (crystals)	...	...	1½	ounces
Sodium carbonate (crystals)	...	...	1½	"
Potassium bromide	...	...	5	grains
Water	...	...	10	ounces

For use, one part of the stock solution is diluted with two parts of water.

Single Solution Metol-Hydrokinone Developer for Negatives.

Metol	...	...	50	grains
Hydrokinone	...	...	40	"
Sodium sulphite	...	...	500	"
Sodium carbonate	...	...	500	"
Potassium bromide	...	...	25	"
Water	...	...	20	ounces

For use, the developer may be employed full strength, or diluted with its own bulk of water.

Two Solution Metol-Hydrokinone Developer for Negatives.

A.—Metol	...	...	40	grains
Hydrokinone	...	...	50	"
Sodium sulphite (crystals)	...	...	120	"
Potassium bromide	...	...	10	"
Water	...	...	20	ounces
B.—Sodium carbonate (crystals)	...	...	240	grains
Water	...	...	20	ounces

Equal parts of A and B are taken for use.

Metol-Hydrokinone Developer for Bromide Papers.

Metol	...	...	50	grains
Hydrokinone	...	...	25	"
Sodium sulphite (crystals)	...	...	1	ounce
Potassium bromide	...	...	10	grains
Sodium carbonate (crystals)	...	...	1	ounce
Water	...	...	20	ounces

The solution may be used as it is or diluted.

Metol-Hydrokinone Developer for Gaslight Papers.

Metol	...	...	20	grains
Hydrokinone	...	...	60	"
Sodium sulphite (crystals)	...	...	700	"
Sodium carbonate (crystals)	...	...	700	"
Potassium bromide	...	...	6	"
Water	...	...	20	ounces

The solution is used without dilution.



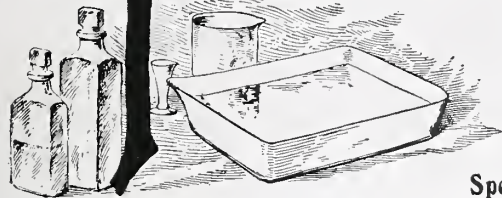
What's that?

By A. P. Cole.

each is dissolved before the next is added. If the order is varied, it sometimes happens that the metol crystallises out of the liquid, and it is difficult to get it to dissolve again.

Some workers are injuriously affected by using this developer, the hands, especially between the fingers, coming

TONING BROMIDE PRINTS.



By J. H. Willis.

Special, to "Photography and Focus."

FASHION affects photographs as well as other things, and the cold blacks and greys of the untuned bromide print have been somewhat out of fashion lately, though not long since they were regarded as amongst the most delightful of photographic tones. Many an amateur who is making bromide prints to-day would no doubt be glad to modify their colour at times. Perhaps the following details may help him to do so.

It would be as well to point out that the composition of the image on a bromide print and on a gaslight print, when both come out of the fixing bath, is the same. Although one paper may contain silver chloride and the other nothing but silver bromide, when they have been developed and fixed this difference disappears. The picture then will consist simply of metallic silver embedded in gelatine. It therefore follows that any toning process for bromide prints will be equally suitable for gaslight prints. The colours produced on the two different kinds of paper are not always quite the same, because the tiny particles of silver which make up the image are generally smaller in gaslight prints than in ordinary bromide prints, and size plays an important part in colouring.

Still, all toning processes that are employed after fixing may be employed either for gaslight or for bromide papers indiscriminately; and for convenience, therefore, when bromide prints are referred to herein, "bromide or gaslight prints" must be understood.

In passing, it might be pointed out that there is a very simple experiment which will serve to show the effect of size on colour. If we take a crystal of copper sulphate, a deep blue, and crush it up, we shall find that it gets lighter and lighter as the particles get finer, until it is finally a greenish-white powder. In much the same way, potassium bichromate, a fine red in the crystal form, is a yellow-orange when powdered. Plenty of other examples of the same sort could be given. To return to our subject, it is

little use attempting to tone poor bromide prints into good ones. The print must be a good one to start with. Some toning processes weaken it, some intensify it; but unless the print is a clean, bright one at the outset toning will only make its shortcomings more conspicuous than before.

The most popular toning method consists of turning the black silver image to a brown one of silver sulphide. This can be done by the "direct method" with hypo-alum, or by the "indirect method," otherwise known as the Blake-Smith process. The result in each case should be the same—a fine sepia—if the print was a good rich one to start with, and the process properly carried out.

To make up a hypo-alum toning bath, five ounces of hypo should be put into a quart jug, and this nearly filled with boiling water. When this is dissolved, half an ounce of powdered alum is added, a little at a time,



Leisure Moments.

By H. G. Drake-Brockman.

and the mixture stood aside to cool. It will be milky in appearance, and a sediment will form, which should not be separated from the rest of the solution. A few spoiled prints should be left in it for a day or two, and it will then be ready for use. If these prints, or cuttings, are not put in, the bath will exercise a strong reducing action on the first two or three prints submitted to it, which, in consequence, will be spoiled.

The solution so prepared may be used over and over again as long as it tones. It can be employed cold, in which case the prints will tone in about twenty-four hours. The usual plan is to employ it hot. To prevent the hot liquid from blistering the print, it must first be hardened in a five per cent. solution of alum. It is best to fix and wash the prints, and then to alum and dry them. They are then put, dry, into the toning bath, which is gradually heated up to about 130° Fahr. At this temperature the toning will be complete in twenty minutes. The prints are then again transferred to a cold solution of alum (five per cent.), and while

in this should be gently rubbed with cotton-wool. They are then washed and dried.

In the Blake-Smith process, the prints are first, after fixing and washing, immersed in a bleaching solution, which may consist of the following:

Potassium bromide	...	...	100 grains
Potassium ferricyanide	...	...	100 "
Water	...	...	20 ounces

They are left in this until the image is only very faint, and are then immersed in—

Sodium sulphide (10% solution)	...	...	50 grains
Water	...	...	10 ounces

which soon brings them back to full vigour, and to a rich sepia colour. They are then washed and dried. If the prints lose much vigour in the process, it is a sign that either they were not properly washed free from hypo before bleaching, or the sodium sulphide solution has deteriorated. It is best to keep the sulphide made up in a ten per cent. solution, in well-corked bottles.

A blue picture can be obtained on bromide paper by toning with an iron salt. The print after thorough fixing and washing is immersed in the following solution until the desired tone is reached:

Iron ammonio-citrate	...	...	20 grains
Potassium ferricyanide	...	...	40 "
Acetic acid	...	...	2 drams
Water	...	...	10 ounces

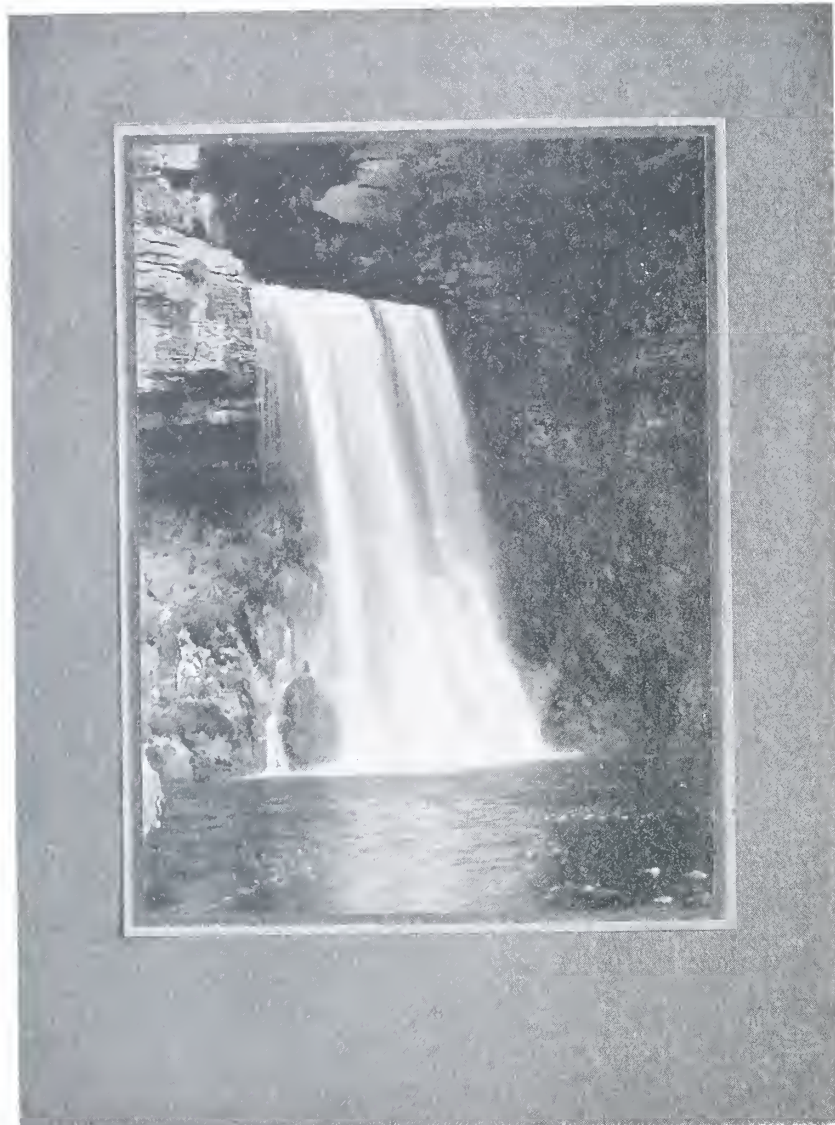
The solution should be freshly prepared. After toning the print is merely washed and dried. It is well to add a few drops of acetic acid to the washing water, to counteract any possible tendency to alkalinity which it may possess, as if it is at all alkaline the print will be weakened.

A whole series of brown and red tones, quite different from those obtained with the Blake-Smith or the hypo-alum process, are got by the copper toning method introduced by Mr. W. B. Ferguson, K.C. Three ten per cent. solutions are required, of potassium ferricyanide, copper sulphate, and potassium citrate respectively. To each ounce of the citrate solution are added, first, one dram of the copper solution, and then fifty minims of the solution of ferricyanide.

The bath should contain no sediment; if there is any, more citrate should be added until it clears. The prints are first well fixed and well washed, and then immersed, dry or wet, in this bath until the desired tone is reached. They are then washed and dried.

Red tones are obtained more easily with uranium than in any other way. To this end the following toning solution should be mixed up:

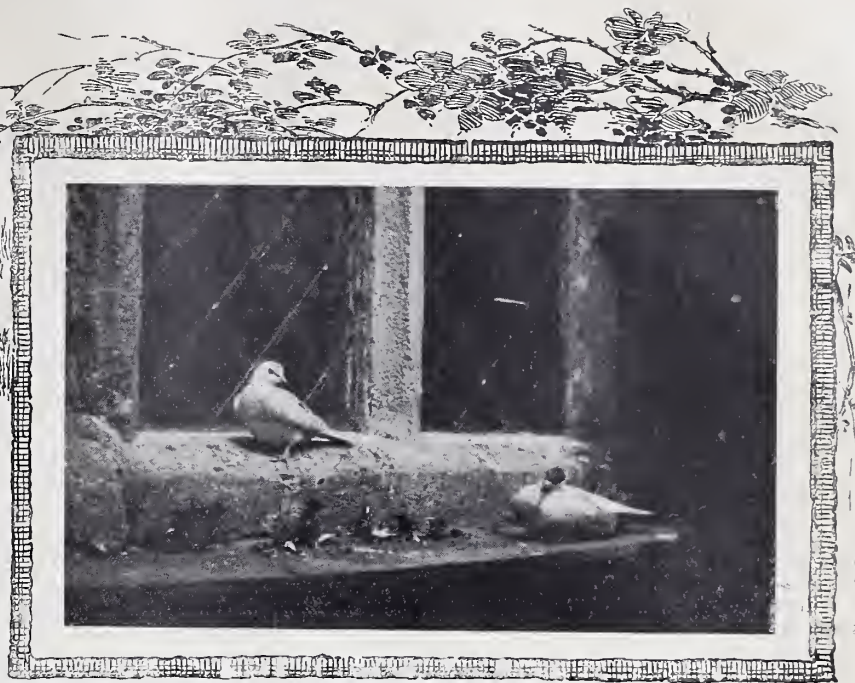
Uranium nitrate	...	...	12 grains
Potassium ferricyanide	...	...	6 "
Acetic acid	...	...	150 minims
Water	...	...	10 ounces



THORNTON FORCE, INGLETON.

BY T. I. HOLT.

Awarded a Prize in the "Focus" Landscape Competition.



Placed, wet or dry, in this solution, the tone of the print changes rapidly through sepia and brown to red. As the bath does not keep long in working order, it must be made up from time to time as it is required. A ten per cent. solution of uranium nitrate and another of potassium ferricyanide may be kept, and the bath made up by taking two drams of the uranium, one of the ferricyanide, and adding them to 150 minims of acetic acid in an ounce of water.

The range of colours obtained with uranium is a very wide one, from warm black to bright red, but the process has long lain under the stigma of a want of permanence. It is peculiar also, in that the uranium ferrocyanide, which is deposited on the print and gives it its warmth of colour, is slightly soluble in water, especially so if the water is at all alkaline, as most tap water is. The consequence is that if after toning the print is washed for any length of time in plain water it gradually loses its warmth of colour, and reverts to its original condition. To prevent this, it is customary to wash uranium toned prints, after toning, for a quarter of an hour in three or four changes of water, to each of which a few drops of acetic acid have been added. As soon as the whites of the prints are seen to be free from any discoloration, the washing may be stopped.

The toning of bromide prints has received much attention from Mr. Blake-Smith, whose book, "Toning Bromide Prints" (Iliffe, 1s. nett, or post free 1s. 2d.), is the standard treatise on the subject, and should be on the shelves of all those photographers who work any of the processes with which it deals.

Mr. Blake-Smith has pointed out that uranium toned prints can have their whites cleared very rapidly by immersing them, after toning, in a one per cent. solution of ammonium sulphocyanide. This not only clears the whites, but brightens up the colour of the rest of the print very considerably. After the sulphocyanide

treatment the prints should be washed in two or three changes of water, then in several changes of dilute acetic acid, and finally in three or four changes of water.

Before leaving the subject of toning bromide prints, there is a process which is comparatively little used, which may be regarded as a toning process, although it only yields a black image. Everyone at some time or another must have got bromide prints which were good in all respects but one, that one being that they were of a greenish or rusty colour. It is a comparatively simple matter to restore them. They are first to be bleached in the bromide and ferricyanide bath above referred to, when dealing with the Blake-Smith process. They are then well washed for about a quarter of an hour in several changes of water, and finally are redeveloped in an amidol or metol developer, which should contain no bromide whatever. The whole of the operations are conducted in daylight, and after the redevelopment there is no need to fix the prints for a second time; they have merely to be well washed, and may then be dried.

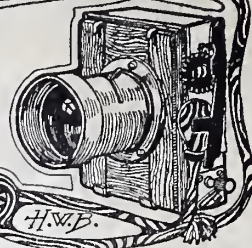
Many other methods of toning bromide prints have been put forward from time to time, but those which have been described above are practically all which have acquired any degree of popularity. As has been already pointed out, they are only advantageously applied to bromide or gaslight prints that are good black ones to start with. The redevelopment method is an exception in this respect, as it is an excellent way of improving the colour of a print which, from unsuitable developer or any other cause, is greenish or rusty in tone.

The uranium process is an intensifying one, so that the print may be a little weaker than normal, while both the hypo-alum and the Blake-Smith methods call for prints that are decidedly on the strong side, if a good colour is to be obtained. The redevelopment process last mentioned results, worked in the way therein described, in a slight increase of vigour.

Long Focus Focal Plane Work.

BY ADOLPHE ABRAHAM, B.A.

One of a series of short articles on focal plane photography. Preceding articles appeared in "Photography and Focus" July 28 and Aug. 11.



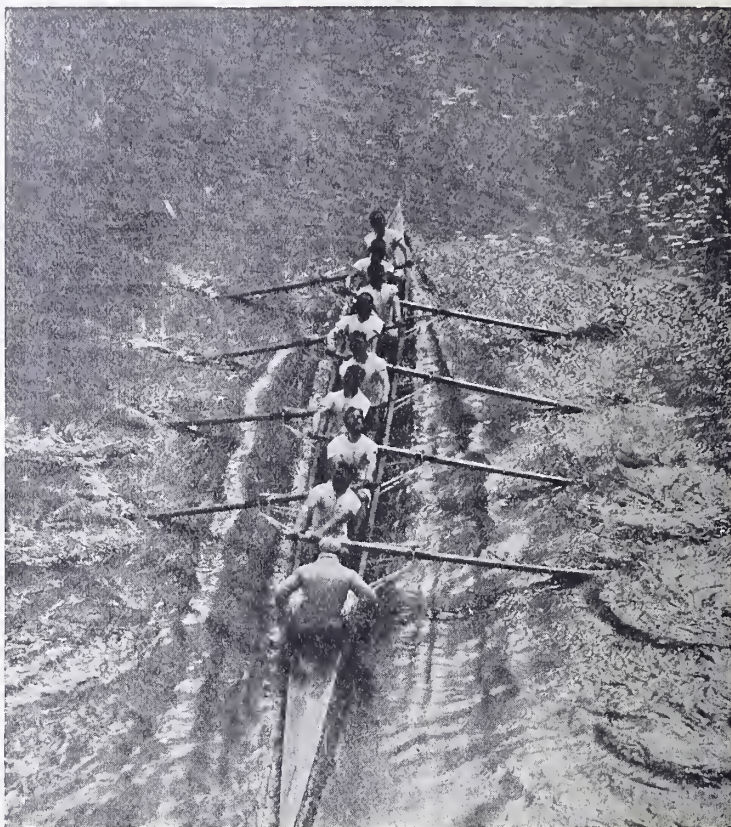
I DO not wish to suggest that I am the apostle of the long focus lens in high speed work, but my early results were described by lens makers as "a revelation" to them, so that I am disposed to think that hitherto its advantages had not been sufficiently appreciated. I venture to conclude that no amateur is likely to disburse a considerable sum for a big lens of long focus and wide aperture when he can utilise the single components of a first-class lens; and here, therefore, I am referring only to the single lens which has a focal length, roughly, double that of the combined lens, and also (unfortunately) has one-fourth the aperture.

I divide the uses of the long focus lens in high speed work into (a) optional and (b) obligatory. The first class is readily dismissed. Everyone knows that there are various disadvantages attending the use of a short focus lens—in brief, the picture produced is artistically inferior because of the incorrect perspective. I was, in fact, first stimulated to attempt the introduction of "art" into my snap-shots by an adverse criticism of a photograph which had gained considerable kudos for its technical excellence: the critic referred to it as an "offence to an artistic eye on account of discrepancies due to the use of a lens of too short a focus."

When working at the riverside I invariably use the single lens without hesitation. Of course, the occasions when very fast work (1-250s. and faster) can be achieved at $f/12.6$ are not so many, and one has reluctantly to sacrifice any artistic features for the sake of the fuller exposure.

Turning to the obligatory section, I refer to occasions when the photographer cannot get near enough to the subject to obtain a picture large enough for his purpose. A rowing eight snapped with an 8in. lens from a bridge will give a very poor little result; but the single lens, with a focus of perhaps 15in., gives a sufficiently large image, with, of course, the additional advantage of better perspective.

Then, again, at some athletic sports one is not permitted to go into the centre of the ground to photograph, and from the spectators' enclosure the runners, jumpers, etc., are perhaps rather too far away. But here the single lens once more will amply suffice, provided, of



Taken from a bridge: the Cambridge Eight.



Focal plane work with a long focus lens.

reasonably good—that is to say, good enough for exposures of 1-250s. at $f/12.6$. I may say I have often given exposures up to 1-350s., on Extra Rapid Plates working at $f/12.6$ in sunlight from 3 to 4.30 in March, and have produced negatives which, of course, could not by any means be termed perfect, but which were at least good enough for the press.

I cannot conclude without emphasising that in focal plane work one is constantly encountering instances such as I have been describing when the single lens with its comparatively long focus is invaluable, and the advantages of the reflex type of camera for the necessary adjustment will be found to be quite inestimable.



Ozobromes from Toned P.O.P. Prints.



BROMIDE or gaslight prints form the best basis for ozobromes; but we have already shown in *Photography* that P.O.P. prints may be used in the same way with complete success. In an article contributed to the "Photo-Era" Mr. William Findlay describes how he was inspired by our article already referred to to attempt to get an ozobrome from a P.O.P. print which had been toned.

The first trials were made by treating ordinary toned prints on P.O.P., and also prints on self-toning P.O.P., just as a bromide would be treated; but failure was the result in each case. With some self-toning papers, as is well-known, a salt bath gives a purple tone, and a print so treated gave a little more encouraging result in ozobrome. Thinking the salt might have something to do with it, Mr. Findlay tried other kindred substances, and finally found that by giving a toned print on gelatino-chloride or on collodio-chloride paper a three minutes' soaking in a ten per cent. solution of potassium bromide, followed by a mere passing through water and drying, it was possible to use it for ozobrome.

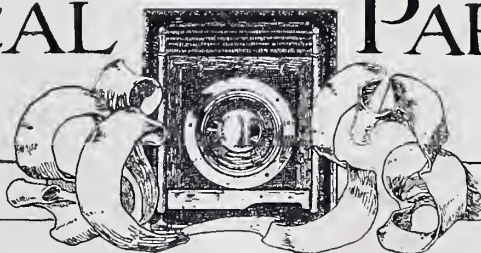
The prints were immersed in running water, the pigment plaster in the ozobrome solution, and the squeegeeing done in the ordinary way. They were left in contact for half an hour and then separated, the ozobrome plaster being squeegeed to single transfer paper and left for twenty minutes

under pressure. Development was then carried out in the usual way, and in both cases a successful result was obtained. But with this difference—the ozobromes showed more contrast than the original prints, they were not exact replicas. A little of the detail was also lost.

The prints were re-developed with amidol, but the action was a slow one, and when they were re-developed they had lost their original colour, and were of the lemon-yellow appearance usually associated with P.O.P. prints that have been fixed out without toning. An attempt to get a second ozobrome from one of these prints failed at first, which was all the more curious since the ozobrome solution reduced the print quite as much as in the first instance, and on re-development it came up quite as strong as before the second attempt was made. When the print had another treatment with the bromide solution it yielded a second copy.

It is not easy to understand what has been taking place in these experiments. Theoretically, a solution of potassium bromide should be without effect upon a gold-toned silver print. Then again, the bromide being extremely soluble, the washing before applying the pigment plaster should remove practically all of it. The disappearance of the original rich colour of the P.O.P. print is more easily accounted for, as, in self-toning papers particularly, the colour is due much less to any gold toning that may have taken place than to the silver of the original image.

PRACTICAL PARAGRAPHS



MEASURING INSTEAD OF WEIGHING.

For many purposes the following procedure, which we quote from "Camera Craft," will give results that are sufficiently accurate. Much depends on the way in which it is carried out. If the chemicals measured are always in crystals or powder of the same degree of coarseness, almost every solution likely to be required by the amateur could be made up in this way as well as in any other. The quantity of dry chemical is first weighed out and put on a piece of paper. Taking several pieces of wood of suitable size, a hole is bored in one end of each to a convenient depth and the bottom of the hole smoothed out with a small gouge. The weighed-out chemical is placed in the hole without packing it too solid, and the surface of the wood cut down until it is just level with the chemical. The other end is then flattened to form a handle, inscribed with the name of the chemical and fitted with a hole for hanging it up on a nail. Similar "spoons" are prepared for the other chemicals in the same way. Where the quantity would necessitate too large a "spoon," the difficulty is overcome by arranging so that a certain number of "spoonfuls" give the desired amount, and the handle is so marked. The "spoons"

for any given stock solution all hang in their proper place, and using them in making up solutions greatly facilitates the work. The first spoon is taken down, dipped into the bottle, and its edge drawn against the shoulder of the bottle as it is withdrawn, thus insuring that the hole is level full. The contents are put into the stock bottle, and the operation is repeated through the list. The bottle is then filled to a mark on the outside, and the solution is ready as soon as the chemicals are dissolved.

* * *

MOUNTING P.O.P. PRINTS.

Some workers mount their P.O.P. prints while still damp from the last washing water. There are two reasons why this should not be done. One is that the prints are then in an expanded condition, being full of moisture, and as they dry they contract, and make the mount curl very badly. The drier the print the less trouble there is from this source. The other reason is that prints which have been dried after washing are much tougher. The drying seems to harden the gelatine, and reduces the chance of injury to its surface very greatly.



REVIEWS

The Art of the Camera. "The Studio" Special Summer Number.

A SPECIAL summer number of "The Studio" has just made its appearance, and deals with the art side of photography. It is published at 5s. in paper covers, or 7s. 6d. in cloth, and forms a handsome volume, which should be in the hands of all workers who have any interest in advanced pictorial work. There are ten pages of letterpress by Mr. Dixon Scott, dealing in a rather high falutin style with colour photography, or rather with Autochrome work, and an attempt has been made to reproduce several Autochromes in colour. In spite of Mr. Scott's whole-hearted admiration for these reproductions—"the unique image on the Lumière transparent 'positive' has never hitherto been reproduced with so much sensitive and meticulous loyalty," he observes—we cannot regard them as doing justice, or anything like it, to the originals, unless these originals are very bad. The fact remains that, for the present at least, no reproduction process exists that will give any real idea of the Autochrome original; and the fact that "The Studio" has failed must not be made a reproach to that beautiful magazine, but a testimony to the hopelessness of the attempt.

The real interest of the volume lies in the monochrome pictures, of which there are nearly a hundred. They represent

very faithfully the work of one side of pictorial photography—the side usually associated with the Salon and with the Photo-Secession, although even here the selection is curious. It would be interesting, for example, to learn how it comes about that the work of Mrs. Coburn is represented while that of Steichen is absent.

A very few of the pictures are so far exceptions that they seem intended to represent the other phase of pictorial work, and one wonders how they have secured admission; but the names of the Cadbys, Crooke, Evans, Gear, Mummery, and Puyo, to mention only a few that occur to us at the moment, are all conspicuously absent.

Those who frequent the annual photographic exhibitions will know, of course, that this collection is an adequate summary of one side of pictorial work only, and will take it for what it is worth and appreciate it accordingly. The great majority of those into whose hands it may fall will, we fear, not be aware of its limitations, and may regard it as standing for all that is best in the art of the camera. From this point of view we cannot help a feeling of regret that the selection was not more catholic, and that a really handsome and well produced volume should suffer so much from a complete want of balance.

The Grada Foreground Ray Screen.

THE "Grada" is the name given by its makers, Messrs. John J. Griffin and Sons, Ltd., to the graduated colour screen or light filter, which they are putting on the market. The screen is of a yellow tint, deep in colour at the top, and gradually getting paler until at the bottom it is clear glass. The idea is obvious. The screen is attached in front of the lens with the deeply tinted part uppermost. In this condition the sky is held back while the foreground is not affected. The result is that a negative can be obtained with this little piece of apparatus in which all the clouds will be kept, yet without any risk of under-exposing the foreground.

As the foreground is taken through the clear glass part of the screen, and as in any case the exposure would have to

be decided by the foreground, the use of the "Grada" does not prolong the actual exposure. All it does is to hold back the sky, and at the same time to render it more orthochromatically.

The screen is effective in actual use, and is certainly a very ingenious solution of a difficulty which every landscape photographer has encountered. As it is optically worked, it may be used with the most perfectly corrected lenses without any fear of it interfering with their definition.

The "Grada" screen is made in several sizes, ranging from 1in. to 2½in. in diameter. The former sells at 7s. 6d. and the latter at 30s. It is circular, and is mounted in a metal ring, which is provided with springs which allow it to be fitted readily to the hood of the lens.

The Smallest of Reflex Cameras: The "Tella."

THE Tella Reflex camera claims to be the very last word in portability. This will be better understood when we point out that the external measurements of the quarter-plate size are 6 by 5 by 5¼in., and that its weight complete with Ross Homocentric lens and ground-glass focussing screen in position at the back is only two and a half pounds.

The Tella Reflex is provided with sufficient extension to work easily with half of the complete lens. The rack work alone will provide an extension of over 10in., and in addition to this, there is an extension tube which furnishes another 2in., so that a lens of 11in. focus or more may be used. There is thus no need, when the half lens is being used, for it to be in front of the diaphragm, as is sometimes necessary—a position which is not so satisfactory as the other. The front allows of a rise of about an inch, and the camera is fitted with a reversing (but not a rotating) back. The hood and other fittings call for no particular remark.

The general arrangement of the camera is a convenient one, and the details are well thought out. The shutter release is actuated by the left hand, the focussing pinion by the right. The movement of the mirror is very smooth, and the camera, even at the greatest extension, is rigid. Six single metal dark slides are provided of a very thin design, and light trapped. The exterior fittings are finished in black, and the camera is covered with fine grain black leather, giving it an excellent appearance. But its great features, as we before remarked, are its extraordinarily small size, and light weight, and these must commend it to many who have avoided the

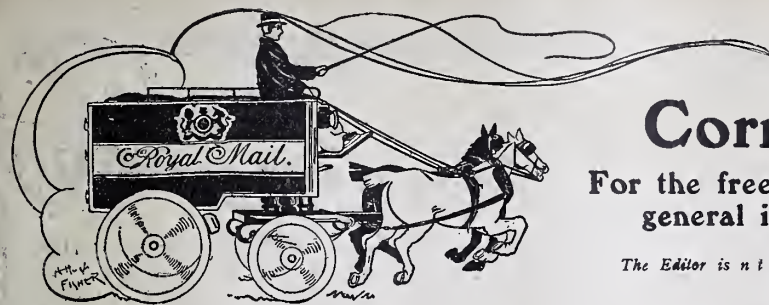
reflector type on account of the bulkiness usually associated with it.

We were very pleased with both the appearance and the behaviour of the camera in use, and are pleased to be able to give it unqualified approval. It is made by the Tella Camera Co., of 68, High Holborn, London, W.C., in quarter-plate, 5 × 4, postcard size, and half-plate. The quarter-plate camera and six slides without lens, sells at £10 10s., the half-plate at £21. The camera is listed with a large number of different lenses

Zigas.

THE gaslight paper Zigas, made by Messrs. Thos. Illingworth and Co., Ltd., of Willesden Junction, London, N.W., was introduced in October, 1906, so that it has now been before the photographic public for nearly two years. It is made in two grades—"Ordinary," a grade giving plenty of contrast, and so suitable for the ordinary run of amateur photographers' negatives; and "Portrait," a paper giving soft prints from studio negatives. Each grade is made in three surfaces—glossy, matt, and satin.

THE LANCASTER PHOTOGRAPHIC SOCIETY holds an exhibition at the Friends' Hall, Lancaster, from November 23rd to 26th inclusive. Particulars can be obtained from the honorary secretary, Mr. J. Holt, 11, Fern Bank, Lancaster.



Correspondence.

For the free discussion of all matters of general interest to photographers.

The Editor is not responsible for the opinion of his correspondents.

TONING P.O.P. WITH HYPO-ALUM.

Sir,—I was much interested in the accounts of your correspondents of the difficulties which they encountered in toning P.O.P. in the hypo-alum bath.

For some time past I have been toning P.O.P. in a solution containing lead acetate in addition to the hypo and alum. I have always found it satisfactory, and unless the prints are left too long in it, it does not give yellow tones in the high lights.

The bath is composed of the following substances dissolved in the order given:

Hypo	...	...	...	...	3 ounces
Lead acetate	...	...	...	...	60 grains
Water	...	...	...	...	16 ounces

In order to get good pure tones, there are two points needing particular attention. First, the prints must be taken much darker than they would be for gold toning. The depth of printing depends on the tone required, being more for cold tones than for warm. For a rich warm brown tone it is about right to print until the shadows begin to bronze. Second, a suitable negative must be used. As with the ordinary gold baths, weak negatives will not give good tones in this bath.

As to the permanence of the prints I can say nothing at present; but if they are properly fixed there does not seem to be any reason why they should not be at least as permanent as P.O.P. prints toned in the usual way. I feel sure that if your correspondents would try this bath, they would not meet the difficulties which they find in using the hypo and alum alone.

Yours, etc.,

L. E. BASTABLE.

Sir,—The following experiences may be of interest to your readers: For some time I found that P.O.P. prints toned by the hypo-alum method suffered from yellowness in parts, evidently due to sulphur. I also found that after twenty minutes' immersion the prints began to become fainter and fainter. The first difficulty I have quite overcome.

My method of procedure is as follows: First, I print slightly deeper than the finished print is required to be. Then I place it straight into hypo without any previous washing. Three ounces of hypo to the pint of water, for ten minutes—no longer. Then I transfer it, without washing, to the following hypo-alum bath.

Hypo	...	...	...	...	3 ounces
Alum	...	...	...	...	1 dram
Water	...	...	...	...	20 ounces

It is left in this until the tone that is desired is acquired, and, finally, is washed for an hour, preferably by suspension.

Hypo is cheap, and should not be stinted, say, three ounces of hypo solution to six postcards, to ensure complete fixation. The same hypo should not be used for two batches of prints, unless one wishes to court failure. The hypo-alum solution may be used repeatedly.

Yours, etc.,

H. ALVAREZ HOUNSELL.

Sir,—With regard to the unevenness of toning which your correspondents have experienced with hypo-alum, I can only say that it has never occurred in my tests, unless the print was overtoned. The colour is perfectly even as far as a certain shade of brown, but after that the high lights sometimes tone the fastest. The temperature and the make of paper may affect the point where this occurs, but on Wellington, Paget Prize, and Rembrandt P.O.P.'s I have had no trouble whatever.

As regards fixing separately, this necessitates much deeper printing, without, as far as I can see, any compensating advantage. The salts in the paper are chloride, nitrate, and generally citrate, none of which are affected by sulphur in

the cold, and all are removed by the excess of hypo before the toning action commences. However, the chemistry of this process, like that of gold toning, is still somewhat uncertain, and, until more is known, the theory can scarcely be discussed. When a brown tone is required, this bath gives just as good colours, and is simpler and cheaper than gold toning, but overtoning is ruinous to the high lights.

Yours, etc.,

H. JEFFREYS.

Sir,—I have read with much interest your notes at different times on the hypo-alum toning of P.O.P., and I notice in this week's issue you invite the experiences of your readers.

To-day I left a printing frame containing a negative of a house (upper part black and white), and a piece of mauve Imperial P.O.P., exposed for too long, so that the result was greatly over-printed and apparently useless. I thought, therefore, I would try the new process. I left the print in a solution of hypo (six ounces to the pint) for ten minutes. This considerably reduced the density and left the sky and the white part of the house a pinky colour. I then took a quarter-plate dish half filled with hypo, same strength as above, and stirred in as much powdered alum as would stand on a shilling, and left it therein for about twelve to fifteen minutes. The result was a good purple colour. The sky and white portions are quite clear; in fact, I was pleased and surprised at the result.

I think your readers who record their failures in this week's *Photography and Focus* can hardly be blamed for their procedure, as the average amateur would not believe it possible to tone a print after fixing it. Had I experimented before seeing this week's issue, I should certainly have done as they did.

This is one of the many helpful hints for which I have to thank *Photography and Focus*.

Yours, etc.,

ALFRED PRICE.

Sir,—Since seeing the formula for toning P.O.P. with hypo alum, in *Photography and Focus*, I have toned successfully dozens of prints, following exactly the process given, i.e., without previous washing and fixing. I enclose a post-card for your inspection. You will observe that there is scarcely a trace of yellowness, even in the somewhat dense sky. For simplicity, rapidity of working, and cheapness, this process ought to find favour with all amateurs who dabble in P.O.P. Perhaps some of our scientific friends will be able to tell us something of the permanence of the image.

Yours, etc.,

SULPHUR.

Sir,—You ask for your readers' views on toning P.O.P. with hypo-alum. I am only a beginner, and find the usual difficulties with gold toning. So, on seeing the letter by Mr. H. Jeffreys in your issue of July 7th, I made up the bath and tried it on these cards, which I send you. I find that they tone evenly, both washed and unwashed, but it has a reducing effect, and that they need to be deeply printed. Also there is a kind of scum which wants wiping from the face of the print after washing. It seems to me to be easier, more certain, and cheaper than gold, it hardens the print, and the tone is good enough. What I should like to know is, if they are well washed before and after this bath, whether they are as permanent as gold-toned prints.

Yours, etc.,

ALEX. JOHNSTON.

[The above is a selection from a large number of letters on this subject which we have received. Many of them have been accompanied by prints which showed clearly enough that excellent tones could be obtained on P.O.P. by this method.—Ed.]



The Seven Stages of Landscape Photography.

BY W. D. REID.

Special to "Photography and Focus."

The taking of a landscape photograph may be considered as the performance of seven successive operations. If these are done methodically and systematically, there is much less risk of failure. Our contributor gives a series of valuable hints under each of the seven headings.

BESIDES those failures which are due to a want of photographic knowledge, failures of which all of us must have our share, every photographer has others which are due to want of method. They are quite independent of one's photographic skill *per se*, and the cleverest worker may be the very one who has the greatest number of such disappointments. Nervousness and flurry, excitement, forgetfulness, or simple carelessness may lead to the spoiling of a plate quite as readily and quite as completely as light fog, or over-exposure, or incorrect development. There ought to be room, therefore, for a little consideration of "method," since it is by "method" alone that these things can be avoided; and method in outdoor photography is therefore the topic of this article.

The photographer on landscape work bent, who finds himself where he thinks a picture can be made, has seven distinct operations to perform. Thus:

1. Selecting a view point approximately.
2. Setting up the camera.
3. Deciding its precise position.
4. Focussing.
5. Putting in the plate.
6. Exposing.
7. Packing up again.

We can most conveniently consider the seven stages of photography in this order, noting in each case the method which will be most likely to lead to a successful result.

(1.) Selecting a View Point Approximately.

This has been put first, because there is no need to set up the camera until we have convinced ourselves that in all probability there is a picture to be made. It is merely an unnecessary labour. We had much better put the whole kit on the ground, and, getting out our view meter, wander round, trying first this arrangement and then that, to ascertain whether the pictorial material which first attracted our attention to the scene is really within the capacity of our outfit or not.

A view meter is so emphatically a labour-saving appliance that it may be as well to point out how such a piece of apparatus can be made. It is extremely simple. All that has to be done is to take a piece of card, as shown in fig. 1, and cut it in four, these four pieces being then hinged together with narrow strips of tape, so as to make a kind of collapsible box open at both ends. Two little lids are made to fit on this box, so as to hold it in position. When these lids are removed, the whole thing folds up flat, and will go in the pocket or camera case, taking up practically no room at all. In the exact centre of one of the lids is a small eyehole, and in the centre of the other lid is an opening with square corners, the sides of which opening are in exactly

the same proportion as the sides of the plate which we are using. It need not be the same size, but the proportions must be the same. For half-plate size, we may conveniently make the opening $3\frac{1}{4}$ in. by $2\frac{3}{4}$ in.

Nothing has been said about the length of the box, but this is important. It must be adjusted to the lens in use, and must bear the same relationship to the focus of the lens as the size of the opening in the lid does to the size of the plate in use. Perhaps an example will make this clear. We will suppose the camera is a half-plate one fitted with a 7 in. lens, and that the opening has been made $3\frac{1}{4}$ in. by $2\frac{3}{4}$ in., as just described. This is just one-half the length and one-half the width of the half-plate, so that we must make the length of our box one-half the focus of the lens—that is to say, $3\frac{1}{2}$ in. The interior of the box is best coated with matt black varnish, but this is not at all important. When all has been done, we shall find that when we hold such a view meter up to one eye and close the other, we shall see on looking through the little eyehole exactly the same view in the opening at the other end of the box as we should see on the ground-glass when the view had been focussed with the lens. The meter is shown complete in fig. 2. The box serves to cut off the surrounding objects, and so helps to give us a better idea of what the photograph would look like when finished.

It is with such a little piece of apparatus, then, that the first operation set down above should be carried out; and when we have decided that it is worth going on with, we may proceed to

(2.) Setting up the Camera.

The tripod should be set up with one leg pointing in the direction of the subject. This allows the camera to be tilted up or down by the movement of that leg only, and it also allows the photographer to stand between the other two for focussing. An exception may be made when the ground slopes very much, the legs being then arranged so as to secure the steadiest position. They should always be well spread out, so as to form a firm basis; one frequently sees tripods used with the feet so close together that the whole arrangement is unsteady. At first the camera should be quite level, and its height that which the tripod gives with the full extension of its legs, fairly well opened, but a lower

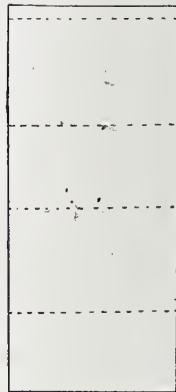


Fig. 1.

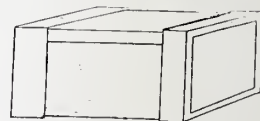


Fig. 2.

position should often be examined whenever there seems to be any likelihood that it will be a better one. Many a picture would be vastly improved by lowering the camera to within a couple of feet of the ground or thereabouts. As far as possible, this should be done with the sliding legs, so as to keep the angle of the legs one at which the greatest steadiness is secured. When the tripod has not got sliding legs, a similar result can often be got by folding the legs at one of the joints—making it kneel, in fact.

Having set up the tripod, we may put the camera on it and open it out. The tripod screw should not be tightened up at first. The camera should be extended to a point a little short of that at which the picture is usually in focus. In order to keep lens mounts reasonably light, the brass tubes or rings are not very thick, and therefore the screw upon them cannot be very deep. The result is that it is not very easy sometimes to "find the thread." The proper way to do this is to hold the lens in the flange and to turn it gently the reverse way. If this is done, before we have made a complete turn we shall feel a little jolt, and the lens will seem to slip in with a "click." If then we start at once to turn it the other way, the threads will be found to engage, and the lens will screw home quite easily. No force on any

account should be used in screwing the lens into its flange, or there will be a great likelihood of the thread becoming "crossed," and the lens will have to go to the maker or be an incessant source of trouble.

Before screwing the lens into position, it should be glanced at, to see that it is clean. Some photographers make a practice of giving it a thorough polish every time—one of the most injurious things that can be done. A lens should never be wiped unless it is seen to need it, and then only very gently. A single speck of dust on a lens does no harm; even a layer of dust does not interfere with the definition, but makes the negative foggy, so it has to be removed. The better plan is to carry the lens so that it does not get dusty, either in a little case, such as some dealers supply, or with a lens cap on each end.

Before deciding the precise position of the camera, it is well to glance over it and see that, at the start, all its adjustments are in the normal position; that is to say, the side swing not in use, the vertical swing ditto, the rising and cross fronts central. We then know that in whichever direction we may want to use these movements we can do so without readjustment.

(To be continued.)



Figures in Landscape.

BY E. B. WOODS.

Special to "Photography and Focus."

ONE of the commonest faults of the landscape photograph in which a figure is introduced is that the figure itself is hopelessly prosaic.

It never seems to occur to the photographer that his smart friend in a tweed suit and soft felt hat strikes a jarring note, which might very easily be avoided; at least, it seems to occur to very few to attempt an alteration.

A make-up which will do all that we want can often be extemporised, and will convert the dapper business man, who may be clean and neat, but certainly is not picturesque, into the tramp who may at least be made to possess this latter attribute. The hat is quite easily bulged into disreputability; the coat may be taken off and the sleeves tied round the neck, or it may be put on inside out. The mere taking off of a collar, or completely covering it by a handkerchief loosely knotted round the neck, works wonders. Then the trousers may be hitched up and tied with string at the knees, a rough stick cut out of the hedge and put in his hands, the model turned with his back toward the camera, and the transmogrification is complete. It is better to have a back than a front view with a made-up model of this kind, because it is much more easy to avoid anything incongruous.

In exactly the same way, a lady may turn herself for the moment into the most countrified of maids. There is no need to particularise here the changes that should be made, because there is a greater variety in ladies' clothing, and one must deal with the par-

ticular materials that are to hand, and because also a lady will know far better what to do than any mere man can tell her. The great thing is to let the figure be as completely in keeping with the surroundings as possible; and if there is any part which seems to jar in the composition, to hide it or to render it as unobtrusive as possible.

Not only must the figure be one which is in keeping with the landscape, the pose must be in keeping also. Anything like a violent or strained attitude must be avoided.

The great thing to guard against in this work is the inevitable tendency of the model to look as if he or she were being photographed. The back view is a great help in avoiding this result. It is best to settle on the exact position for the camera and the arrangement of the subject generally before the figure is introduced, as otherwise in all probability the model will be tired of standing in the prescribed attitude long before the exposure is made.

The proportion of figure to landscape must have careful thought. If it is to be a figure subject, the landscape being a mere background to the model, the latter may occupy the greater part of the plate. But if it is to be a "landscape with figure," the figure must be much smaller in proportion to the rest of the subject. But here, again, we must be very careful not to get the figure too small. If it is, the effect is simply worrying, and it would be better to leave out the figure altogether.

The use of models greatly increases the enjoyment that can be got out of landscape work. It introduces an entirely new set of problems to the photographer, some of them by no means easy; but the pleasure he will experience in tackling them and in overcoming them is a keen one.

Narrow and Wide Angle Work all with the same Lens.

Special to "Photography & Focus."

BY ERNEST SPENCER.



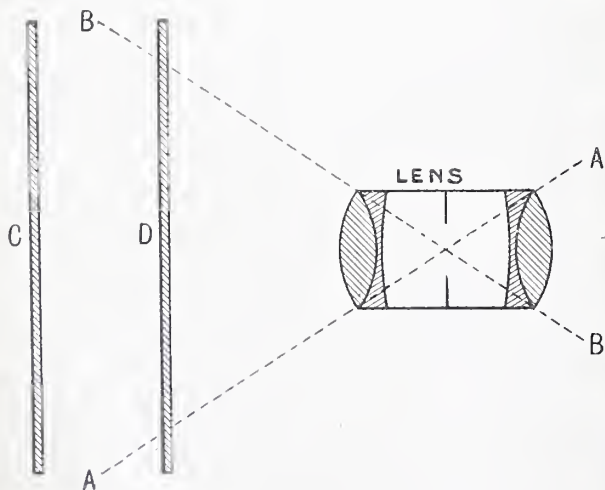
READ with much interest the note on "A Wide Angle Dodge" on page 46 of *Photography and Focus* dated May 26th, and venture to suggest yet another method of increasing and decreasing the amount of view taken in by a lens. Curiously enough the method—I will not call it a new one, although

I have never seen it advocated—is suggested by another note which appears on the same page, namely, on the use of very small stops.

Many amateurs can only afford one lens, which of course has a definite focus, and such a lens very often will not take in the view required. It may therefore interest those readers who possess only one lens to know that by the insertion of very small stops the lens may be brought a little nearer the plate, or may be placed at almost any distance away from the plate, without in any way destroying the definition. That is, of course, provided the lens is not racked in towards the plate too much or too large a stop is used.

The smaller the stop used, the more one may vary the distance between lens and plate with safety, and the narrower or wider the angle of view embraced.

It is pinhole photography in another form and with many advantages, the chief being that a larger aperture is permissible, the exposure thereby being shortened.



It is much easier to get a narrower angle than a wider one with a lens of definite focus, because of the construction of the lens tube. Ordinary lens tubes are longer than those supplied with wide-angle lenses, and therefore cut off the corners of the pictures if the lens is too close to the plate. The diagram will explain.

The light travels as shown at A A and B B. C shows the

correct position of the plate, and it will be noted at once that the rays of light between A and B cover the whole of the plate at C. But if we rack in the lens near to the plate so that the latter comes to the position shown at D, the cone of light will then be found to be too narrow, and will not cover all the plate. This covering power varies, of course, with lenses; with some we may take the lens very much nearer the plate than others. It matters little, however, how far we increase the distance between the lens and the plate for the purpose of narrowing the angle, because the covering power increases, and there will be no cutting off of the picture.

As very small stops are absolutely necessary when adopting this particular

dodge, focussing in the usual way is almost impossible, even with very bright views. The best way to set to work when narrowing or widening the angle is to rack the lens in or out as desired as much as is considered necessary, remembering that the nearer the plate the more of the view we take in, and *vice versa*.

We first open the lens out to the largest stop, place the head under the focussing cloth, and then insert smaller stops

A WIDE AND A NARROW ANGLE VIEW FROM THE SAME POSITION WITH THE SAME LENS.



The upper picture is fig. 1 and the lower fig. 2.

in rotation. The view will at first be very much out of focus, but as the smaller stops are placed in the lens the operator will see the picture gradually gaining in definition,



SUNLIGHT IN THE BELFRY.

BY H. T. WINTERHALDER.

but at the same time losing its brilliancy. He will then, before arriving at the very smallest stops, be able to judge within a little whether the edges of the picture are cut off by the lens tube, how much of the view is taken in, and whether it be fairly sharp or not. If one is certain the picture will not be sharp, the lens is racked in or out too much for the stop, or the latter is not small enough, because the smaller the stop the more one may "play" with the distance between lens and plate.

It must be admitted that there is a little guess-work and chance in the method, just as in pinhole work, but the dodge is one which at times comes in very useful indeed. A little experimenting will soon convince the worker of its great usefulness; and a mark may be made on the baseboard of the camera to show how far one may safely vary the distances without great loss of definition and cutting off the edges of the picture.

Details of the examples shown herewith may be of interest. A builder wanted a photograph to show a row of houses and an adjacent school, but the lens I took with me to do the job was of too long a focus. Fig. 1 shows the best this 8in. lens would do; one second at $f/8$ was given. By racking the lens nearer the plate I was able to get fig. 2, and I could have got more in had not the lens tube cut off the light. The image was, of course, very much out of focus at $f/8$, but by placing the smallest stop in the lens—about $f/100$ —the image was sharpened up, and an exposure of about two and a half minutes gave me No. 2, which was what the builder wanted.



Fig. 3.



Fig. 4.

Figs. 3 and 4 were taken as an experiment, just to see what my lens would do under the above conditions. At its proper focus the lens is 6in. from the plate. I focussed the bust properly, and then racked in the lens about an inch, stopped down, and took fig. 3. The lens was then racked out three or four inches (there being no danger of the tube cutting off the light), and fig. 4 taken with a very small stop. I have not measured the size of the stop actually used for this exposure, but it is probably somewhere in the neighbourhood of $f/150$.

The exposure that was given for the bust in fig. 3 was five minutes, and a quarter of an hour for fig. 4. Exposure increases with the distance between lens and plate, just as in pinhole work.



SUNSHINE ON THE PATH.

BY ARTHUR TURNER.

Awarded a Prize in the "Focus" Landscape Competition.

Imperial Plates

The
Popular
Brand.

Unrivalled
in
Excellence.

Possess
the qualities
most essential
for successful
holiday negatives.

Imperial Plates

THE IMPERIAL DRY PLATE CO., Ltd., Cricklewood, London, N.W.

BUSINESS NOTICES.

OFFICES.—20, Tudor Street, London, E.C. Telegrams: "Cyclist, London." Telephone: 5610 and 5611, Holborn.

PUBLISHING DATE.—PHOTOGRAPHY AND Focus is on sale throughout the United Kingdom every Tuesday morning.

SUBSCRIPTION.—PHOTOGRAPHY AND Focus will be forwarded regularly at the following rates: GREAT BRITAIN. ABROAD:

	s.	d.		s.	d.
Twelve Months ..	6	6	Twelve Months ..	10	10
Six Months	3	3	Six Months	5	5
Three Months ...	1	8	Three Months ...	2	9
Single Copy	1½		Single Copy	2½	

REMITTANCES.—Postal Orders, Cheques, etc., should be crossed and made payable to Iliffe and Sons Limited.

ADVERTISEMENTS.—All communications on advertisement matters should be addressed—The Advertisement Manager, PHOTOGRAPHY AND Focus, 20, Tudor Street, London, E.C. All copy for displayed advertisements for the issue of any particular week must reach Tudor Street by the first post on Monday morning in the week previous.

PREPAID ADVERTISEMENTS.

SALE AND EXCHANGE (for Amateurs only).

—1d. per word, minimum 9d.

PROFESSIONAL AND TRADE.—Three words 2d., minimum 1/-.

All advertisements to be inserted on these terms must be accompanied with remittance. To ensure insertion, letters should be posted in time to reach the offices, 20, Tudor Street, E.C., not later than first post on Wednesday.

BOX NUMBERS.—For the convenience of advertisers, letters may be addressed to numbers at the office of the paper. When this is desired, 2d. will be charged for registration, and three stamped and addressed envelopes must be sent for forwarding replies. Only the number will appear in the advertisement. Replies should be addressed, "No. 000, c/o PHOTOGRAPHY AND Focus, 20, Tudor Street, London, E.C."

DEPOSIT SYSTEM.—Persons who hesitate to send money to unknown persons may deal in perfect safety by availing themselves of our Deposit System. If the money be deposited with PHOTOGRAPHY AND Focus both parties are advised of this receipt, and upon intimation of the arrival and acceptance of the goods, the money is forwarded, less a charge of 1/- for registration. The time allowed for a decision after receipt of the goods is three days. For all transactions exceeding £10 in value, a deposit fee of 2s. 6d. is charged. Cheques and money orders should be made payable to the Proprietors, Messrs. Iliffe & Sons Limited, and addressed to them at Coventry.

PUBLISHING NOTICE.—Communications for the Publishers should be addressed, Iliffe & Sons Limited, 20, Tudor Street, London, E.C.

EDITORIAL NOTICES.

ADDRESS.—All communications for the Editor should be addressed: The Editor, PHOTOGRAPHY AND Focus, 20, Tudor Street, London, E.C.

TO CONTRIBUTORS.—The Editor will be glad to consider original up-to-date manuscripts on photographic subjects. All contributions must be typewritten, or in very legible handwriting, on one side of the paper only, and should bear the name and address of the sender. Letters or communications arising out of matters already appearing in the paper are not paid for. The Editor disclaims legal responsibility for the safety of matter submitted to him, but he will endeavour to return rejected manuscripts, etc., when a stamped addressed envelope is enclosed for that purpose. No notice whatever can be paid to communications without the name and address of the sender, not necessarily for publication.

PRINTS FOR CRITICISM.—Readers sending prints for criticism or advice are notified that in all cases it is understood that by so doing permission is given for their reproduction, without fee, in PHOTOGRAPHY AND Focus.

PRINTS FOR REPRODUCTION.—Reproduction fees are only paid by arrangement beforehand. The sending of a print, without any condition stated, will be taken as permission to reproduce it without fee. The Editor will be glad to consider for publication, with or without letterpress, photographs of special interest, on terms to be arranged.

PAYMENTS.—Articles and illustrations are paid for on acceptance.

INTERVIEWS.—The Editor will be at 20, Tudor Street, on Wednesdays, between the hours of 9.30 and 11.30 a.m., but can only be seen at other times by appointment.



THE ARCHITECTURAL DETAIL Postal Club. The honorary secretary's name and address are Mr. W. Maitland, 32, Ellerburn Street, Thornaby-on-Tees.

THE DONCASTER CAMERA CLUB holds its annual exhibition on November 11th and 12th in the Dolphin Chambers, Market Place. There are two open and six members' classes, entries closing October 27th. Particulars can be obtained from the honorary secretary, Mr. F. A. Jordan, Claremont, Windsor Road, Doncaster.

BLUE TONES ON P.O.P., writes "Camera" in "The Westminster Gazette," can be obtained by printing the paper strongly, fixing and washing, and then immersing in ammonia-citrate of iron (10%), 5 parts; potassium ferricyanide (10%), 5 parts; nitric acid (10%), 10 parts; water, 100 parts. Prolonged immersion should yield a good blue tone, not obtainable by the ordinary gold baths, and the tone will be brightened by a short treatment in potassium cyanide, one part in 1,000 parts of water.

Books for . . . Photographers. . .

Science and Practice of Photography.

By CHAPMAN JONES, F.I.C., F.C.A., F.R.P.S.

Price 5/- nett. Post free 5/4.

Instruction in Photography.

By SIR WILLIAM ABNEY, K.C.B.

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Practical Orthochromatic Photography.

By ARTHUR PAYNE, F.C.S.

Price 1/- nett. Post free 1/2.

Successful Negative Making.

(Illustrated.) By T. THORNE BAKER, F.C.S.

F.R.P.S.

Price 6d. nett. Post free 7d.

All About Enlarging.

(Illustrated.) By C. WINTHORPE SOMERVILLE,

F.R.P.S.

Price 6d. nett. Post free 7d.

Photography Made Easy.

(Illustrated.) By QUI-VIVE.

Price 6d. nett. Post free 7d.

Lantern-slide Making and Exhibiting.

(Illustrated.) By JOHN A. HOOGES, F.R.P.S.

Price 6d. nett. Post free 7d.

Pictorial Landscape Photography.

(Illustrated.) By J. C. WARBURG.

Price 6d. nett. Post free 7d.

A full list sent on receipt of a postcard,

ILIFFE & SONS LTD.,
20, TUDOR ST., LONDON, E.C.

THE RAJAR CAMERA for the best print on Rajar P.O.P. has been won this month by G. Elvin, of the Square, Fakenham, Norfolk.

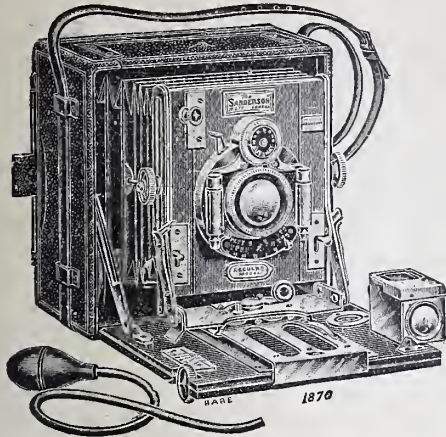
LORD CRAWFORD was the subject of the cartoon in "Vanity Fair" last week. The result is a life-like representation of the Earl, whose able presidency of the Royal Photographic Society is not likely to be forgotten in the photographic world.

THE THORNTON-PICKARD Mfg. Co., Ltd., of Altrincham, is offering £100 in cash prizes for photographs taken with Thornton-Pickard apparatus. Entries close on October 1st, so that no time should be lost in sending to the company for a copy of the prospectus, which will be forwarded post free to all applicants.

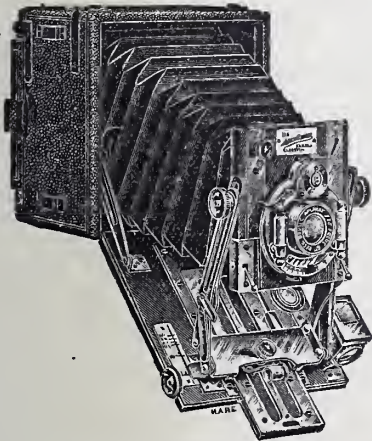
THE ROTHERHAM PHOTOGRAPHIC SOCIETY holds its annual exhibition from the 14th to 17th October, entries closing October 5th. There are open classes, including one for photographs in colours. Particulars can be obtained from the honorary secretary, Mr. H. C. Hemmingway, Tooker Road, Rotherham.

A MEETING OF PHOTOGRAPHERS is announced for September 26th at the Franco-British Exhibition. We hear that hand cameras are to be admitted free of charge, by special permit to be obtained from the honorary organising secretary, Mr. E. Human, of 43, Whitta Road, Manor Park, Essex, who will be pleased to supply full particulars.

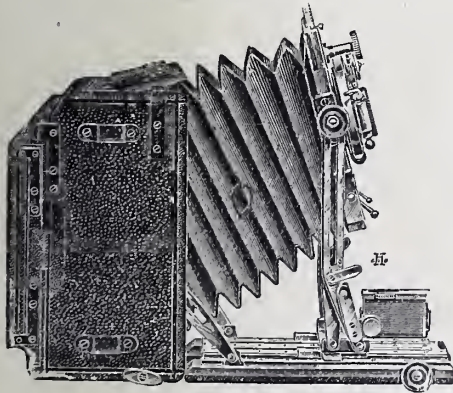
PRESS PHOTOGRAPHERS AGAIN. We quote the following from the "Daily Mail" of the 13th inst. "Last evening the photographers at Le Mans, who are not allowed to take photographs, protested once more to Mr. Wright and marched off the racecourse. Presently a dozen of them crept back softly amid the trees up to the boundary of the racecourse. Suddenly, as Mr. Wright and his men were engaged in fixing the aeroplane preparatory to a flight, one photographer rushed out, took two photographs at close quarters, and started back to cover. He was followed by a policeman and Mr. Wright himself, but reached the boundary and safety first, amid cheers. Taking advantage of the chase, a dozen other photographers dashed in on all sides and snapped the aeroplane from every conceivable position. All got away except a cinematographer, who was unable to move his heavy instrument. He looked the picture of despair as Mr. Wright and a policeman came up and threatened to have him arrested for trespassing unless he gave up his films. The man drew out a long band of films, which Mr. Wright took. The man got into a motor car in waiting, and as he drove off shouted, "I gave up unused films; I have got the real ones here." Numerous cinematograph entertainments in Paris are already advertising Mr. Wright's flights.



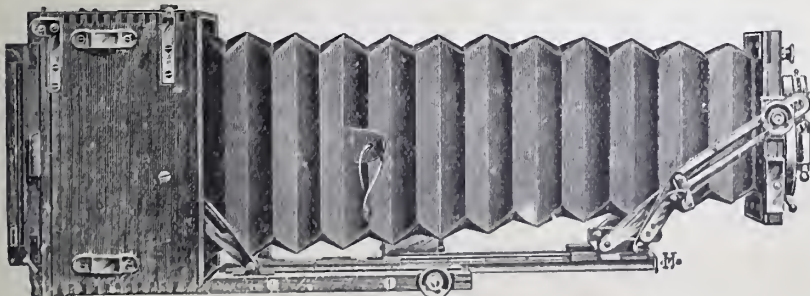
This is a Sanderson with the Lens in the normal position.



Here the Lens has been dropped by means of the Sanderson Front, to get an excess of foreground.



The Lens can be raised by the Sanderson Front to give an excess of sky.



Pictures may be doubled in size by extending the Sanderson Front and removing the front part of the Lens.

Why the "Sanderson" is so very much better than other Cameras.

The Sanderson Universal Front is a patent, or rather a series of patents, any one of which would be useless without all the others. The Sanderson Front is called Universal because it rises, falls, recedes, extends, or swings in a perfect arc at the will of the operator. Yet it can be locked rigidly and instantly in any position.

Then, again, the Lens is swung on its axis, and the locking nuts that control its movements are fitted at the end of the axial pins.

Each of the swinging Arms that carry the Lens front have one single slot that goes through its entire length, and in these slots the axial supports of the Lens can pass freely up or down, backwards or forwards, always preserving its balance, and ready to be locked rigidly in any position by a single touch. All these wonderfully simple movements are patented.

The great point to remember is that in buying a Sanderson you are getting the finest, most famous, and most useful Camera that the world produces.

You are buying a most beautifully made Camera, one that will serve you well and can always be absolutely depended upon. You are buying a Camera with a reputation that is above reproach.

There are Field Cameras and Hand Cameras in the Sanderson series, and the prices range from

£4 4s. to £31 12s. 6d.

Call at any good Photographic Dealers and ask to see a "Sanderson."

Write for a booklet (stating whether you want a Hand or Field pattern) to the manufacturers:

HOUGHTONS

The largest manufacturers
of Cameras in the Kingdom,

**88/89, HIGH HOLBORN,
LONDON, W.C.**

PLEASE MENTION "PHOTOGRAPHY" WHEN CORRESPONDING WITH ADVERTISERS.



REPLIES TO CORRESPONDENTS.



Queries are dealt with in strict rotation in the order received. Only "Urgent Apparatus" queries will be dealt with by post, for which purpose a stamped envelope must be enclosed.

REGULATIONS.—(1) Envelopes must be marked "Query," and the "Enquiry Coupon" found elsewhere must be enclosed. (2) The full name and address in addition to a *nom-de-plume* must be given. (3) Only one question on one subject is allowed in each letter. (4) Prints may be sent for criticism, but a separate coupon must be sent with each print, and a stamped addressed envelope (not loose stamps) for their return.

THE WEEK'S QUERY.

RESTORING FADED NEGATIVES.—Some time ago I sent several gross of film negatives to a well-known firm to be developed. They were returned to me in a very satisfactory condition, as far as the eye could see; but now the images are gradually and surely fading away. Is there any process by which these negatives could be restored to a printing density?—BART ROUS.

The fading of negatives is not a fault of which much is heard; and it is very difficult to say to what it is due. We should not be disposed to blame the firm off-hand for what has happened. Some years ago it was found that star negatives obtained for astronomical purposes were fading, and Sir William Crookes worked out the following method, which was found to restore them. The plates were soaked for three hours in distilled water, and then immersed for ten or fifteen minutes, in the dark, in a developer each ounce of which contained three grains of pyro, three grains of sodium metabisulphite, thirty-six grains of sodium carbonate (crystals), and twelve grains of sodium sulphite. After well washing the plate was immersed for half an hour in a solution of hypo of a strength of three ounces to the pint, and then washed in running water for six hours. It was next toned with gold. For this purpose two solutions were made up, one of ten grains of ammonium sulphocyanide to the ounce of water, and one of gold chloride of one grain to the ounce. For use an ounce of each was taken and both added to eight ounces of water. The plate was soaked in this for ten minutes, removed, and washed in running water for half an hour, transferred to a dish of distilled water, where it was left for an hour, drained on blotting paper, and finally allowed to dry.

REPLIES IN BRIEF.

C. ROWSTON (Scarborough).—Mr. A. B. Allen, of 20, Endell Street, Long Acre, W.C., repairs cameras.

KODAK (Hampstead).—The film has been wound off after the camera was shut up, and has rubbed against the bellows.

EXWYZED (Bangor).—Probably the makers take a sanguine view. If you use Mr. Watkins's system, it is only fair to use his figures also.

J. RAFFAN (Hnntley).—Undoubtedly they would tend to cause it. The Planastigmat, the Omnar, or the Fulmenar should answer your purpose.

TEE CEE (Finsbury Park).—Yes; the quantity given is correct, when the stock solution is to be kept for long. But if it will be used in a month, a quarter of an ounce will suffice.

H. C. DAVIDSON (Newbury).—Stopped down to the same aperture it will give just as much depth as the E.R. lens, if the foci of the two lenses are the same. You could not do better than what you propose.

RATIONAL (Hitchin).—The print is reproduced the size which the editor chooses, if no stipulation is made to the contrary. A large block can be made from a small print direct, without making an enlargement.

F. G. NICOLL (Dundee).—It is not very important. If you have already used any plates for any purpose at all, it will be well to continue to use the same sort for landscape work. If you have not used any it would be well to use "ordinary" rapidly to start with.

H. H. CAMBURN (Tunbridge Wells).—The best plan would be to use the wet plate process for the titles. Messrs. Mawson and Swan supply films for stripping purposes, and a line to them at Newcastle-on-Tyne would no doubt bring prices and full working instructions.

O. CALLARD (St. Albans).—Your enquiry is rather vague. Your best plan would be to call at Clarkson's in Holborn, opposite the end of Gray's Inn Road, tell them what you propose to do, see what they have that is likely to be of use. A one inch objective would be very suitable as a start.

R. G. VAUGHTON DYMOCK (Southampton).—We have referred the matter to our advertisement department who state that the mistake was theirs. Any serious error in one of our advertisements, causing inconvenience as it may do to thousands of readers, is as you say "deplorable." Still now and again they are bound to occur.

MAX (Bromley Cross).—You would do well to use a lantern plate of the "Paget Slow" type. If the photographs are sharp, the grain will inevitably show on the lantern screen. It could be hidden by throwing them a little out of focus, but we should regard the remedy as worse than the disease. Thanks for the cuttings, which we have sent on.

PRECEPTOR (Liverpool).—We never heard of it.

MORGAN (Aberdare).—There is always some distortion, but in many cases it is not appreciable. You would not notice it in the case you mention, for instance.

BLACKBIRD (Sible Hedingham).—There is a good formula on page 320 this week. The developer is all right; there is nothing much to choose between the various developers.

NUCKET (Upper Edmonton).—Yes, the No. 3 Ensign will take plates. The dark slides cost 1s. 6d. each, and can be obtained from any dealer or direct from Houghton's, Ltd.

RIISING FRONT (Ferns).—There is no better method than to close up the camera, open the focussing screen, and see if the centre of the lens is or is not in the centre of the opening.

STOPIT (Ramsgate).—The numbers are U.S. numbers, standing for 1/11, 1/16, 1/22, and 1/32 respectively. Both methods of marking are correct. You have put the numbers against the openings to which they refer, the makers have put them opposite to the openings. This latter is the usual course.

LEHCIM (Liverpool).—Schiendl has written, in German, a big history of photography, and a smaller history in English, by Jerome Harrison, is sometimes to be picked up second-hand. For a brief summary, you might refer to Chapter I. of "The Complete Photographer" by the editor of *Photography*.

H. D. BRIGGS (Streatham).—You had better use the largest stop which will give you a sharp picture, and the plates and developer to which you are accustomed. If you wish to use others, then one of the photo-mechanical plates would be very suitable, employing the developer recommended with them. The exposure must be determined with a meter.

A. E. BASHAM (Snodland).—We duly returned your card. The tone is one which we should expect to obtain by using the formula given by the maker, provided the negative was suitable. We fear you have not fully realised that the negative is the factor which in this case is all important. See rule 3 above.

T. H. HARRISON (Stapleford).—Many thanks for the Borealis picture; it is very interesting. The fault in the portrait is either very bad light, fog during development, bad dichroic or chemical fog, or else extreme over-exposure. It is probably the last. The result is that all the highest lights are reversed, positive on the negative and negative on the print.

STEREO (Dundee).—The lenses must be placed at the normal separation 3in., whether you enlarge from them subsequently or not. The camera must be fitted with a separator which should extend right up close to the dark slide in one direction and go far enough towards the front to prevent any light from one lens getting over into the other half of the camera.

JUMBO (Hull).—We do not know of any "Edinburgh Photographic Exhibition," but the honorary secretary of the Edinburgh Photographic Society is J. T. McCulloch, W.S., 3a, North Saint David Street, Edinburgh. The Edinburgh International Exhibition contains many photographic exhibits; for particulars the manager should be addressed. The exhibition will find him.

STAINS (Belfast).—Pyro stains can be reduced by leaving the negative for some little time in a clearing bath composed of thio-carbamide 50 grains, citric acid 25 grains, water 5 ounces; or in alum 2 drams, citric acid 1 dram, water 5 ounces. The latter is to be preferred, but the action of the former is the more energetic. If the stains are bad and the negatives old, no cure will be of much use.

NOVEL LIGHTNING (Queen's Park).—The marks in the sky in Nos. 2 and 3 are undoubtedly lightning. There is no lightning visible on No. 1, the mark being due to movement of the camera while the lens was uncapped and pointed towards a bright light in the street, probably the shop front, or whatever it is, which shows in all three prints. You can easily get a similar result any night without lightning.

H. HOVEY (Edmonton).—"The Stereoscope and Stereoscopic Photography," by Drouin, price 2s., or post free from our publishers, price 2s. 3d., is the only other one we know. We shall be glad to classify the negatives if you will give us time enough and will write again with them explaining why they are sent. The United Stereoscopic Society's honorary secretary is Mr. A. J. Snow, 74, Lloyd Road, Walthamstow, E.

CONCHOIDCRYPTOSOPHOSOMATO (Glasgow).—If we had a *nom de plume* like yours we should take something for it. The formula recommended in *Focus* for February 14th, 1906, for a quick drying sensitiser for carbon tissue was as follows:

Potassium bichromate	...	...	...	...	1 ounce
Water	...	...	...	...	15 ounces
Liquid ammonia	...	...	...	...	1 dram
Methylated spirit	...	...	...	...	15 ounces

The Original Gaslight Paper.

1889 ~ 1908
19 Years of Supremacy

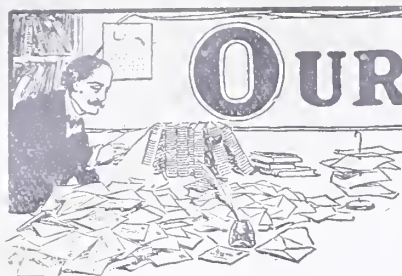


Simple to use,
Full of
Artistic possibilities

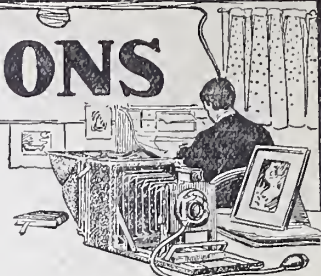
**Delicate,
Mellow
High Lights.**

**Rich,
Pure Black
Shadows.**

<p>KODAK LTD. London, Liverpool & Glasgow</p>	<p>SOLD BY ALL DEALERS and</p>	<p>GRIFFINS, Kingsway — London</p>
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OUR COMPETITIONS



BEGINNERS' COMPETITION.

Open to all photographers who have never taken an award.

PRIZES.

First Prize.—A signed copy of "The Complete Photographer," a half-guinea work by Mr. Child Bayley, now in its second edition.

Second Prize.—A free subscription to *Photography and Focus* for twelve months.

One or more certificates of honourable mention will also be awarded.

RULES.

(1) Each competitor can send as many prints as he likes, but each print must bear on the back the coupon, published each week, the name and address of the sender, the title of the picture, and no other writing whatsoever.

(2) No print will be eligible that is larger than 5½ in. × 3½ in. (postcard size) or 5 in. × 4 in.

(3) No print must be mounted.

(4) No handwork other than simple spotting is permitted on negative or print, nor shading or dodging of any kind. It is distinctly understood that entry in the competition implies a declaration by the competitor that this rule has been complied with; and in case of dispute the editor shall have the right to call for the negative, from which the entry purports to be a simple direct contact print.

(5) No prints will be returned, and no correspondence with regard to the competition can be undertaken.

(6) The publishers of *Photography and Focus* shall have the right to reproduce, without payment, any of the prints sent in, winning or otherwise. But except the winning prints, the names of competitors of other prints that may be reproduced will not be published without the competitor's consent.

(7) All entries must be addressed "Beginners' Competition," the Editor of *Photography and Focus*, 20, Tudor Street, London, E.C., and must be delivered at that address by the first post on the closing date at the very latest.

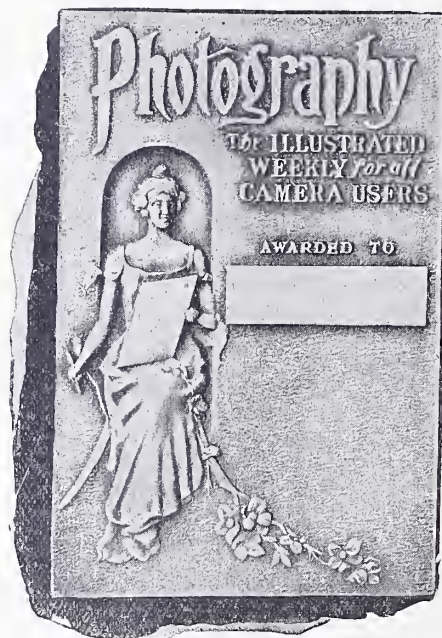
CLOSING DATE.—Monday, August 31st.

SLIDE COMPETITION.

Full particulars of the annual lantern slide competition, entries for which close on Monday, October 19th, will be found upon page 315 last week.



"Photography" Medal. Actual size.



"Photography" Plaque. Actual size.
Weight in silver over three ounces.

ADVANCED WORKERS' PRINT COMPETITION.

PRIZES.

First.—"Photography" Silver Plaque.

Second.—"Photography" Bronze Plaque.

Third.—"Photography" Bronze Medal.

One or more certificates of honourable mention will also be awarded.

RULES.

(1) All photographs must be sent addressed "Advanced Competition," the Editor of *Photography and Focus*, 20, Tudor Street, London, E.C., postage paid, to reach there not later than the first post on the closing date, and must contain a stamped addressed envelope or label (not loose stamps) if they are to be returned.

(2) Each photograph must be mounted, but not framed. Prints in slip-in mounts are not eligible. Each must bear on the back the name and address of the sender and the title of the picture. No letters or other communications must be enclosed with the prints. Every print must bear attached to its mount a coupon for the competition of the month, which will be found in each issue of the paper.

(3) Each photograph must be the work of the competitor as regards selection and arrangement of the subject, exposure and development of the negative, and printing, development or toning, and mounting of the print.

(4) The prints which are accompanied by stamped envelopes or labels will be criticised by post, and the editor shall have the right to reproduce any of the prints, winning or otherwise. The awards will be made a fortnight after the closing date.

(5) Awards may be increased or withheld at the absolute discretion of the judge, and in all cases of dispute the decision of the editor will be final.

(6) There is no restriction as to the eligibility, except as set forth in these rules, and except that the same negative must not be used more than once in the competition. That is to say, that a print from it once submitted, all further prints, however varied, are ineligible.

(7) Neither editor nor publishers of *Photography and Focus* shall be held in any way responsible for the safety of prints, or for their return to the competitors.

(8) The sending of a print to the competition will be regarded as a declaration to the effect that it is eligible under these rules, and that the competitor agrees thereto.

CLOSING DATE.—Monday, August 31st.

SPECIAL SUBJECT COMPETITIONS. OPEN TO ALL READERS.

PRIZES.

First Prize.—"Photography" Plaque in Silver.

Second Prize.—"Photography" Plaque in Bronze.

Third Prize.—"Photography" Medal in Bronze.

One or more certificates will also be awarded.

RULES.

(1) The subject of each photograph entered must be that announced for the particular competition.

(2) Each competitor can send as many prints as he likes, but each print must bear on the back the name and address of the sender, the title of the picture, and no other writing whatsoever. Each print must have attached to it a coupon for the competition of the month, which will be found in each issue of the paper.

(3) No print must be mounted. No handwork other than simple spotting is permitted on negative or print, nor shading or dodging of any kind. It is distinctly understood that entry in the competition implies a declaration by the competitor that this rule has been complied with; and in case of dispute the editor shall have

the right to call for the original negative, from which the entry purports to be a simple direct contact print.

(4) No prints will be returned, and no correspondence with regard to the competition can be undertaken.

(5) The publishers of *Photography and Focus* shall have the right to reproduce, without payment, any of the prints sent in, winning or otherwise. But except the winning prints, the names of the senders of other prints that may be reproduced will not be published without the sender's consent.

(6) All entries must be addressed "Special Subject Competition," the Editor of *Photography and Focus*, 20, Tudor Street, London, E.C., and must be delivered at that address by the first post on the closing date at the very latest.

SUBJECTS AND CLOSING DATES

A Harvest Scene. Closes Monday, August 31st.

A Seaside Scene. Closes Wednesday, September 30th.

A Portrait of a Lady. Closes Saturday, October 31st.



Searchlights on Torpedo Boats off Hastings. (A. J. M. 1908.)

Photograph by J. J. J. Photo Studio, Hastings.

"The enclosed photograph may interest you.

"The negative was taken on a

Wellington

(Special) 'Xtra Speedy

"Backed **PLATE** (350 H. & D.)

"Our attempts on other makers' plates were

"absolute failures."



"The time has come, the Walrus said, to talk of many things."

I SHOULD not be surprised to learn that by this time quite a number of people are aware of the fact that a Franco-British Exhibition is a-blowing and a-growing at Shepherd's Bush, that it has been christened the White City, and that it is foolishly imagined to be a sort of neutral ground where British bulls and French frogs spend the long happy days being cordially entente to one another. As I have visited the show several times both with and without a camera, I suggested to the editor that I might work off a short article teeming with useful hints to photographers, and embellished with the finest illustrations (by myself) that have yet appeared. He merely gazed at me as a stage manager might gaze at a shilling-a-night super who offered to play Hamlet just to show how Hamlet should be played.

* * *

The consequence is that the secrets of those useful hints will remain buttoned up under my best summer vest. I know, for example, the correct exposure for the Court of Honour by night, and to my certain knowledge there are many who have been most frantically and foolishly wrong in the matter—and on 15 by 12 plates, too. I know where the Autochrome plates are. I know how to make the white buildings stand out against a blue sky so that you can tell which is White City and which is heaven. I know where there are two dark rooms. Everybody else is saying there is no dark room in the whole show, and is growling accordingly. I repeat that there are two—one full of black darkness and one full of red darkness. Find them if you can. I know what "Defense de fumer" means without an attendant having to knock my cigar out of my mouth. I know that the tariff for photographing the natives in the Senegalese village is a shilling a nigger, children half price, and babies in arms four for threepence. I have let out that last secret; but there are lots of other things I know, and I won't say a word. Next time I offer the editor a valuable article perhaps he will think twice before scornfully declining it.

* * *

It is surprising what a number of people drag a camera to the exhibition. Their chief desire seems to be not so much the taking of photographs as the dodging of the payment of a shilling for a permit. Each time I have taken a camera I have paid my shilling like a man (or an idiot), but the only time I have been asked whether I had a permit was when I had finished my exposures, put my camera away, and was practising my French phrases with a young lady who was furthering the interests of a Parisian firm by sitting in a cosy corner laughing at my mistakes in the irregular verbs. Perhaps permits are required for other purposes besides photography.

* * *

When I went to see the finish of the Marathon race I did not take a camera at all. I thought it would be pretty safe to expect that someone or other would be sure to get a photograph or two of the affair. As a matter of fact there were several who did take a camera. Of 60,003 people in the Stadium only the odd three were without cameras. That is why they were odd. As I had no camera myself you may be certain I met with an extra specially fine opportunity of photographing the competitors. That is so. I had a close and uninterrupted view of each one as he passed. I stood on a precariously narrow rail half-way up a 15 foot fence, and looked over the top. I can't explain how I looked over 7½ feet of fence, but I did it. My foothold was so insecure that I should have fallen off many times but for the fact that there was a barbed wire just over the top of the fence, and this becoming entangled in my hair and twisting round my ears materially assisted me in retaining my position. Right opposite me on the other side of the road was a conspicuous man with a hand camera. It was one of the non-focussing

guinea sort, and I felt sorry for the poor owner in his efforts to secure life-like portraits of the runners. By patient manœuvring he would achieve a position in the front row, examine his camera over and over again to see if it was all ready, and then begin to dance with excitement as a pathetic figure like a mechanical corpse with a label on it came doddering slowly along the road. And then just at the moment for making the exposure a policeman would back his horse on to his toes, or a man would wave his hat in his face, or a bicycle would pass close to the lens. Whatever could possibly happen to foil and baffle and aggravate a poor chap did happen. When it was all over I saw him walk away with his camera, and he looked about as happy as if he were going to his own funeral. I felt so sorry for him that I absent-mindedly dropped off the fence without removing the barbed wire from my hair, and then all my spare time was taken up in being sorry for myself.

* * *

As regards photographic work in general at the exhibition, my own experience is that the only subjects worth attention may be divided into two classes—(a) those you cannot photograph, and (b) those you must not photograph. I only make one exception to this statement, and that is that it is a ripping fine place for figure studies. I can lay my hand on my heart and say that never, never, never have I seen such figures. I do not mean only those in the glass cases, but those walking about. Really, on a wet day, when the gravel paths are like quagmires, it is almost impossible to finish the sentence without saying too much. And even on a fine day, if it were not for the crowds and the difficulty of isolating single figures one could get such a collection of photographs as never yet charmed the enraptured eye.

* * *

One has to be cautious, though, in making records of characters typical of distant climes. They look all right, but it is somewhat disconcerting to knock up against an experience like this. You see a lovely brown-skinned, black-eyed damsel in gorgeous Eastern raiment. By a series of ungainly signs you convey to her that you desire to photograph her. She poseth. She thereafter conveys to you by signs her wish to possess many copies of the photograph. You acquiesce by nods, numerous and emphatic. She smileth. You find that during the exchange of signs and countersigns your shutter has remained open yet unabashed. You speak. 'Tis but one soft word; but you speak, and the houri heareth. "Law bless yer ole 'art, Willie dear, if I didn't think you was deaf and dumb," she remarks. And you discover that your would-be study of a charming Eastern figure would have been nothing more than a print of Miss Rebecca Solomonowski, of East London, who wipes off her Eastern complexion every night and dabs on a fresh one every morning. But, after all, some of the figures at the White City are genuine. At least, I think so. But one never knows.

THE WALRUS.

SUBSCRIPTIONS.

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PHOTOGRAPHY. SEPTEMBER 1ST, 1908.

PHOTOGRAPHY

A JOURNAL FOR EVERY CAMERA USER.

EDITED BY R. CHILD BAYLEY.

PUBLISHED WEEKLY.

SEPTEMBER 1ST, 1908. TUESDAY. No. 1,034. Vol. XXVI.



THE ROAD TO THE FARM.

BY E. F. GILBERT.



EDITORIAL

Efficiency in Shutters.

Those who are comparatively new to photography must often feel puzzled over the real meaning of the term efficiency applied to an instantaneous shutter. We hope the article which we print this week will throw some light upon the dark subject for them. It is not easy to see how it comes about that with two shutters, each correctly marked and each giving the same nominal exposure, one may yield a fully exposed negative and the other an under-exposed one, the plates and all other conditions being the same in the two cases. Yet such a thing is perfectly possible.

The focal plane shutter is the most efficient—in fact, it may be regarded as having very nearly ideal efficiency. That is to say, during the whole time that any particular part of the plate is exposed at all, all the light which the lens can pass to that part of it is being passed. It is commonly supposed that the shutter is quite perfect in this respect, but a little consideration will show that this is not the case, although it is so nearly true as to be negligible in practice. But we will not forestall the article itself.

An Old Stager in Photography

A successful competitor in one of the title competitions, writing us acknowledging the receipt of his prize, gave us some interesting particulars of his own long experience in photography. "I dabbled in it," he wrote, "many years ago. In fact, I began in 1859 as a youth, and followed the fascinating pastime for about three years, when I was obliged to give it up. But oh, what a change from then to now! My home-made dark tent, six feet high and three feet square, required the services of an old man when we sallied forth to 'take' views, whilst a companion had to assist in carrying cameras, bottles, baths, plates, etc. I tell my young friends when they go snapping about with their hand cameras that their knowledge of real hard work in photography is nil. There was one advantage of the old process, we saw on the spot what we had got, and if it was not satisfactory another trial was made. I have some negatives yet by me which are bad to beat, and I have prints which have kept all this time (say forty-six years), and are of a good purple tone yet."

From Wet Collodion to the Kodak.

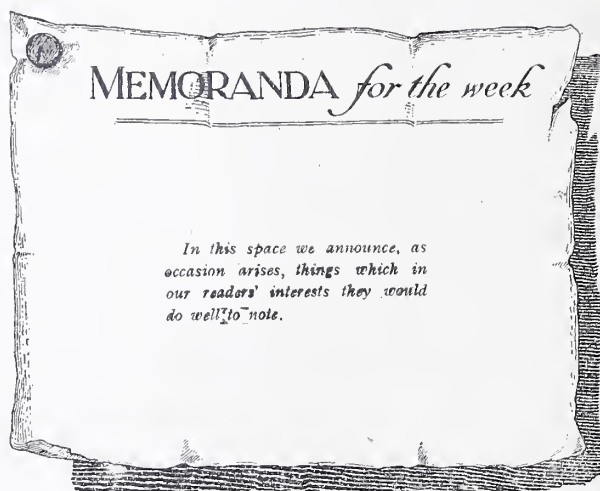
Our correspondent goes on to say: "I had a Kodak (F.P.K.) given me a year or two ago, and have tried to

do a little with the present processes, but it was learning everything over again. I am greatly interested and helped by your paper, which I consider splendid. I took in the 'Photographic News' from No. 1 for a few years, but if the then editor, Mr. G. Wharton Simpson, could see the present photographic papers he would stare—and rejoice." Numerous as are the users of Kodaks, there must be few amongst them who were photographers in 1859. The letter tempted us to compare Volume 1 of the "News" with a present day photographic paper. It is not too much to say that the difference is as great as it is between the photography of those days and of the present time.

Half-a-dozen Aspects.

Has it ever occurred to our landscape readers, we wonder, that, putting aside all minor differences, there are at least half a dozen aspects of the same country under the same weather conditions, and that until each of these has been studied the photographer is certainly not in a position to decide as to its picture-making opportunities? Let us elaborate the point a little. Our imaginary photographer is stopping at A, a riverside village, and two or three miles away is another village on the river, which we will call B. Between A and B there is a tow path. It is required

to know the pictorial possibilities of the walk from A to B. Now if he sets out quite early in the morning and walks to B he will see the scenery under certain conditions. If, instead of walking from A to B, he walked from B to A he would see quite a fresh set of pictures. "Why couldn't he stop from time to time and turn round and look about him?" asks someone. He could, and if he knows his work no doubt he would; but, all the same, the journey made in the reverse direction would give him many aspects which he would miss when walking in the opposite direction. Two more totally different phases of the same pictures would be seen under the noonday sun, and two more when it was near the horizon in the west. Here, then are half a dozen distinct aspects, all on the same day, and without counting changes of weather and of the seasons. Does it not all go to show how much there is to be observed before we can say we "know" a place? And particularly is this the case when we have only seen it under mid-day lighting, when as a rule the opportunities for picture-making are at a minimum.



Slow Plates for Beginners.

Where there are so many excellent plates from which to make a selection it would be invidious to point to any one brand and recommend beginners to use that rather than another. There is no need to particularise makers, but we should like to urge those of our readers who are quite beginners, even if they propose to use a hand camera, to start photography with plates of "landscape" or "ordinary" speed, and not with "extra rapid" ones. For some subjects very fast plates are a necessity, but for the very great majority of those towards which the beginner will be likely to turn his camera a slow plate will be just as suitable as a fast one. Moreover, it will possess in addition certain advantages which are by no means to be despised.

These are the greater ease with which good negatives may be developed on slow plates: then there is much less risk of fogging them by the use of an unsafe light; they are much more robust also in the matter of chemical fog. An incorrectly mixed up developer which might mean ruin if applied to the excessively sensitive film of an ultra rapid plate may do no harm at all when the plate is a slow one. Then, too, slow plates generally allow much more latitude in exposure than fast ones. The coating on them is creamy and opaque, and four or five times the correct exposure will often make no difference at all in the character of negative obtained, except that it will take a trifle longer to print. A beginner of our acquaintance met with failure after failure with his hand camera until we induced him to try "ordinary" plates in it, and at once found a marked improvement in his work. When he finally went back to the very sensitive plates he had

learnt the main principles of exposure and development, and found that he was in a position to use the fast ones to advantage. But some of his hand camera work on the slow plates he still regards as his most work on the slow plates he still regards as amongst his most successful results.

Photographing Printed Matter.

One of the jobs with which the amateur photographer occasionally finds himself confronted is the copying of printed matter—it may be a cut or it may be type—in a newspaper or other rough and ready production. If the paper is thin and is printed on both sides, the type at the back may be very much in evidence, and we may not want to show it at all. A little dodge which will certainly mask it to a very great extent is to press the newspaper that is to be copied up against a clean sheet of glass. A printing frame comes in very handy for this purpose, if it is big enough. In the frame the newspaper is backed up with a piece of card which has had a coating of matt black varnish, or a piece of black velvet or fabric of some kind may be used for the same purpose, though, on the whole, the card will generally be found to be the better.

Owing to the thin paper being more or less translucent the black backing will make its whiteness look degraded somewhat, but the type on the back of the paper will be nothing like so visible as if it were backed up with something white. If a slow plate is used, preferably a photo-mechanical one, and a full exposure and ample development are given, it will be found quite easy by adopting this procedure to get a negative that will yield a print showing nothing whatever of the printing on the back of the original.




The Week's Meetings

MONDAY, AUGUST 31ST.

Bournville & D.P.S. Criticism Evening.

TUESDAY, SEPTEMBER 1ST.

Nelson P.S. "Flower Photography." H. T. Malby.
U. Stereoscopic S. "Some Stereoscopic Curiosities." F. Low.
Batley & D.P.S. Boston Spa.

WEDNESDAY, SEPTEMBER 2ND.

North Middlesex P.S. Lantern Slide Competition.
Maidstone & Institute C.C. Boxley.
Everton C.C. "Enlarged Negatives." J. M. Dullehan.
Windsor P.S. Ely Harbour.

THURSDAY, SEPTEMBER 3RD.

Barrow-in-Furness Naturalists' Field Club. Newland Valley
Northamptonshire Natural History Society and Field Club. Castle Ashby.

SATURDAY, SEPTEMBER 5TH.

Paisley Philosophical Institution. Motherwell.
North Middlesex P.S. Pitsea and Benfleet.
Govan C.C. Kilbarchan.

SATURDAY, SEPTEMBER 5TH (continued).

Barrow-in-Furness Naturalists' Field Club. Broughton.
Boro. Poly P.S. St. Paul's Cray.
Oliver Goldsmith P.S. Shirley Hills.
Manchester A.P.S. The Gort Valley. J. D. Berwick.
Chelmsford P.S. Coggeshall.
Rugby P.S. Stanford.
Wallasey A.P.S. Bidston.
South Suburban P.S. Bookham.
Halifax C.C. Crimsworth Dene.
Tadmorden P.S. Callis.
Dennistoun A.P.A. Harbour and Docks.
Chelsea & D.P.S. Stanmore.
Blackpool & Fylde P.S. Fleetwood.
Bowes Park & D.P.S. Dorking.
Batley & D.P.S. Holmfirth.

MONDAY, SEPTEMBER 7TH

South London P.S. Conversazione.
Walthamstow P.S. "Toning Bromide Prints." S. B. Goddard.
Bradford P.S. Exhibition of Slides.
Southampton C.C. "Hints on Preparation of Exhibition Work." A. E. Henley.
Bowes Park & D.P.S. Lecture. P. Bale Rider.

Societies will have their meetings announced here if the syllabus is sent to us at the beginning of the Session, or from time to time.



PAVERS.

Awarded the Third Prize in the April Advanced Workers' Competition.

BY A. W. WALBURN.



The Meaning of "Efficiency" in Shutters.

An Article for Beginners in Instantaneous Work.



BOOKS on photography which deal with shutters or hand cameras generally have a good deal to say on the subject of the efficiency of a shutter; and those who are not very well versed in photographic language may wonder what is the exact meaning of the term. As it is a subject which concerns every shutter user, it will not be time wasted if it is bestowed on some explanation of the word and of the thing it denotes.

Anyone who considers the action of a shutter on a lens cannot fail to notice that it is inevitable that as it opens some part of the lens must be uncovered by the shutter before another part; and that as it closes, in like manner, it will cover over one part first. Both the opening and closing are gradual, and even in the best shutters a very large proportion of the total time during which any light at all is getting through the lens only part of the lens is uncovered. The photographer may well wonder, when he thinks of this, whether the exposures marked on the shutter are reckoned from the very commencement of the opening to the end of the closing, or for the time the whole lens is uncovered, or in what other way; and it is not easy to answer such a speculation in a few words.

If one of the ordinary methods of shutter testing is employed to measure the speed of the shutter, it will be seen at once that a definite reading is difficult, if not impossible. They are nearly all based on the photography of some object which is moving at a known rate, such as a falling weight or a rotating bicycle wheel. If we know how fast the object is moving and note how much it has moved during the exposure, we are told that we can ascertain at once the duration of the exposure.

Simple enough it sounds, but when we come to try it we find that the image of the object does not begin and end abruptly (unless we use a focal plane shutter), but gradually vignettes or softens off, so as to make it extremely difficult to say where it begins and where it ends. What is more puzzling is that if we make two tests of the same shutter at the same speed, one in a very strong light, so that the test plate is very fully exposed, and one in a weak light, so that it is poorly exposed, the object in the former case will appear to have moved further than in the latter, although actually the two exposures may have been the same.

It is easy to see why this should be so. At the beginning and ending of the exposure the lens is only partially uncovered, so that some of the light is cut off; and the image of the moving object therefore is made to fade away gradually on the plate. The more exposed the plate, the further will

the shaded-off or vignetted edges of the moving object seem to extend.

The efficiency of a shutter denotes the proportion between the light it actually lets through the lens and the light which would get through were the whole of the lens uncovered during the whole time of exposure; and the closer the former approaches the latter the better is the shutter for all purposes where the light is weak or the exposure has to be very rapid.

The focal plane shutter, working as it does close to the surface of the plate, is generally said to have an efficiency of 1, or the greatest possible. This is not strictly the case, but it is practically true, and we may assume that with a shutter of this type the whole of the light going to make up any part of the image reaches the plate during the whole time that part is uncovered by the shutter. This is one of the reasons why the focal plane shutter is so generally used for all highest speed work, the other reason being that it is easier with it to get very short exposures.

When we come to shutters of the roller blind type, working before or behind the lens, we see at once that we cannot expect the efficiency to approach that of the focal plane. By merely pulling the cord slowly, we can see that for quite an appreciable proportion of the total exposure part of the lens is covered up; and we can get an idea, at the same time, by mere examination, of the proportion this bears to the total time. We can see from this alone that the longer the slit, in proportion to its width, the more efficient the shutter.

The best roller blind shutters on the market to-day will be found to have an efficiency of .7 to .8. In other words, the exposure which would be correct with a focal plane shutter will with such shutters need to be increased to one-fourth or one-third as much again.

Those shutters in which a metal plate with a hole in it passes in front of the lens are on the same basis as roller blind shutters as far as efficiency goes. The longer the hole in the direction of its movement, compared with the diameter of the lens, the more efficient is the shutter.

The very popular form of diaphragm shutter, made of a series of metal leaves opening and closing between the combinations of the lens, is one of which the efficiency cannot be judged by mere inspection. As a rule, these shutters are less "efficient" (using the word in this sense only) than those of the roller blind pattern, the efficiency of the diaphragm shutter being generally about .5. In other words, the light reaching a plate exposed with such a shutter is about one-half as much as would reach it in the same time with a focal plane shutter.

A method which will give at least an approximate idea of the efficiency of a shutter was put forward some time ago by Mr. Arthur Payne. Two plates from the same box are exposed as close together as possible to reduce the chance of the light changing. One is exposed by means of the cap, with a small stop in the lens, and the other with a large aperture, by means of the shutter. The two exposures and stops should be so arranged as to be equal (ignoring efficiency). For example, we know that $f/64$ requires just sixty-four times as long as $f/8$. If we give $\frac{1}{16}$ s., therefore, with $f/8$ and the shutter, and give sixty-four times $\frac{1}{16}$ s.—that is to say, 4s.—exposure with the cap, and develop the two plates

together, we can form some idea of the efficiency of the shutter, by comparing the negatives. The weak point of the method is that it depends on the marking both of the stops and of the speed being accurate, and this is not always the case, by any means. But although not indicating the efficiency, it gives useful information as to the exposure needed for the different speeds for which the shutter is graduated.

Although telling how some idea of the efficiency of a shutter may be ascertained, we would not put it forward as a thing that the amateur need worry about. It provides one good reason for getting a focal plane shutter, when very short exposures are to be given, and it is a matter which has to be taken into very careful consideration by the designer of a shutter; but the shutter user, beyond knowing what the term implies, is hardly affected. Efficiency is a very good thing to have when exposures have to be cut down to a minimum, as in the photography of birds flying, motor races, etc., but for the great run of subjects which the hand camera user photographs the difference in efficiency between one shutter and another is unimportant.



The Old Squire.

C. Friend Smith



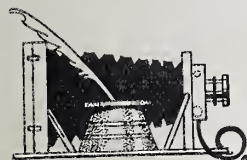
SUNLIGHT AND MARBLE.

BY MAJOR FRANK YOUNG.

Awarded a Bronze Plaque in the Advanced Competition for May.

Sunlight and Marble.

A note upon the picture reproduced upon the opposite page.



IT is given to comparatively few amateurs to use their cameras amidst the wonderful Eastern architecture wherein Major Young has obtained the picture which he calls "Sunlight and Marble"—a scene, if we mistake not, in the famous Jasmine Tower at Agra. At the same time, there are lessons to be drawn from the picture which may be applied to work done under the very different conditions which prevail in this country.

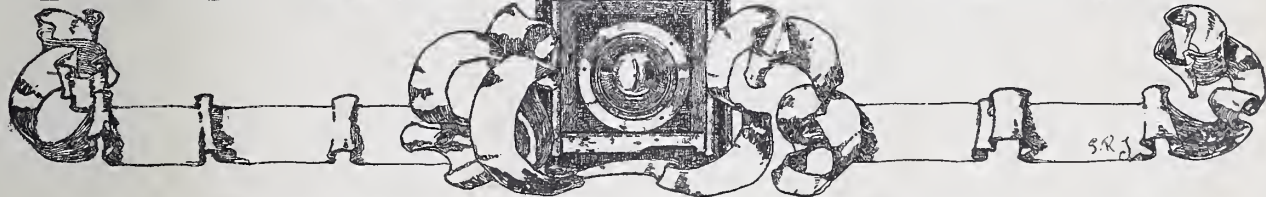
Here we have an extreme of contrast in the subject which exceeds anything likely to be met with in England. Between the white marble pavement blazing in the Indian sun and the deep shadows through the distant arch lie an immense range of tones, all of which are faithfully registered in the picture. True much of the shadow has been lightened by the strong reflected light in which everything is bathed. The most direct effect of this reflected light can be seen on the ceiling and on the panel on the right; but although its influence can only be separately distinguished here and there, it is none the less exercised over every shadow in the picture. This, of course,

helps to lessen the contrast and to make the photography easier, but it was all the same a difficult subject for the camera.

Many photographers confronted with such a picture would find that their high lights were the blankest white and the shadows mere black detailless masses. The chief risk of error in such work lies in the difficulty of appreciating how dark the shadows really are. The blaze of light is so great that over-exposure seems to be an ever-present trouble, and so to guard against it so short an exposure is given that the shadows have no developable image in them at all. If an exposure meter is carried, and is placed in a fairly dark part of the subject, there will be none of this trouble. In such a case as that of the picture by Major Young the detail shown on the extreme right about halfway up would be the place for the meter. Then in developing, if great care is taken to keep the negative thin, even if it should entail intensification afterwards, the printing value of every part of it will be kept.

Full exposure and under rather than over-development are the keynotes of success in work of which this very effective picture may be taken as a type.

PRACTICAL PARAGRAPHS



A USEFUL VARNISH.

Sealing wax crushed small and dissolved in methylated spirit makes a useful varnish for many purposes, drying very quickly, and leaving a hard smooth coating. The solution takes time. The sealing wax should be put into a well-corked bottle until this is about half full, and spirit should then be poured in until the bottle appears three-parts full. It must be put aside for a few days and shaken occasionally. It is excellent brushed over the corks of bottles which contain chemicals that are likely to be injured by exposure to the air.

* * *

CEMENT FOR BROKEN DISHES.

One of the strongest cements that can be prepared is made in the following way. An ounce of isinglass is soaked in two ounces of water and three-quarters of an ounce of hard gelatine is similarly soaked, also in two ounces. When both are quite soft, the vessels are placed in hot water until their contents are liquid, when they are mixed, and one ounce of strong acetic acid added. The mixture should be kept warm and stirred for five minutes, and then, when nearly cold, half an ounce of methylated spirit is added and the cement bottled off. To use it a bottle is stood in hot water until its contents are fluid, and the parts to be joined are touched with the cement, which may be applied with a feather, and pressed together. As it is well not to remelt the cement too frequently, it is better to divide it up amongst a number of small bottles.

POURING LIQUIDS FROM BOTTLES.

Even with so simple an operation as this there are opportunities of going the wrong way to work. The bottle may be held label downwards, so that as the last few drops trickle down its side they run across and stain the label. Not that there is any need for drops to run down the bottle at all, although some people seem to pour more down the bottle than into the measure. The secret of avoiding this lies in keeping the neck of the bottle dry, and giving the liquid a good start. This can be done easily enough without any apparatus when a bottle is not more than half full, but when it is nearly full a glass rod is a necessity. It should be quite clean, and should have its last inch or so dipped into the bottle. When we come to pour, the rod is held with its end pointing into the measure, and its wetted side just touching the mouth of the bottle. The liquid will then be found to run down the rod and not down the side of the bottle. In fact, it is quite an easy matter, with a rod, to pour liquid from a photographic dish into a narrow-mouthed bottle without a funnel.

* * *

GLOSS ON CARBON PRINTS.

Those who wish for a higher gloss on their carbon prints can obtain it by treating the finished, mounted, and spotted print to a coat of a varnish made by mixing one part of painter's driers with four parts of linseed oil. The mixture should be applied evenly and thinly with a clean rag, and the print put aside out of the reach of dust to harden.

HOLIDAY INFORMATION.

THE VALE OF NEATH.

I hope to go to the Vale of Neath in South Wales shortly, and should be glad of any information that you have concerning the district.—J. H. BATESON.

The Vale of Neath (Glamorgan) is a paradise for the landscape photographer. It has the great merit that all the best parts of the district are very get-at-able, while charges are on a very moderate scale.

Aberdare is a pretty little town, and should be made the headquarters. It is an hour's run from Cardiff on the Taff Vale Railway, while visitors from the North can easily reach it from Pontypool Junction in about two hours. There is plenty of accommodation here. The town itself is being modernised, but it has a fine public park, where the trees, rockeries, and little lakes provide material for the camera.

Penderyn and Kilhepstre Falls are reached by road from Aberdare. The former has a fine old church, and the mountainous surroundings are very effective. The Hepstre Falls and the caves are a little further on, where the photographic possibilities are great. There is good free trout fishing here for those who are so minded, and the scenery on the river bank is very fine.

Pontneathvaghan, with fine views of river, falls, mountain and woodland, is reached by taking train to Glyn-Neath Station (G.W.R.) and travelling thence by brake, at an inclusive charge of 2s. 6d. return. Some of the hill-climbs and sheep paths are very difficult to find, and misleading if not dangerous, so the services of local guides, which are very cheap, should be employed.

Pontsarn can be reached by train *via* Merthyr, for which it is the playground, and so should be avoided at Bank Holiday time. Here are the ancient rugged ruins of Morlais Castle, a quaint old church and beautiful river. Cefn, midway between Pontsarn and Merthyr River Falls, is another delightful spot.

Dark rooms and photographic materials are available at both Aberdare and at Merthyr. At the former, at Mr. E. Evans's, chemist, in Victoria Square, and at Merthyr, Messrs. Hoyd. 28, Victoria Street.

MAIDSTONE.

Holiday information about Maidstone and district will oblige.—LEX.

No better centre for mid-Kent than Maidstone could be selected by the photographer. Maidstone itself abounds with historic buildings and picturesque places. The chief of these is the Old Church of All Saints, dating back to the fourteenth century, and overlooking the river Medway at one of its numerous windings. The church is rich in association, and a visit to it and to the Old College near by should on no account be omitted. The museum and gardens and Chillington House in Earl Street, a sixteenth century mansion, should also be seen.

Loose, one of the prettiest villages in Kent, can be reached by tram, and the walk back to Maidstone by the Loose Valley will be found to provide many little views worth taking. Before returning, however, Boughton Quarries, about a mile from Loose, should be visited. There are to be seen some very fine old timbered houses.

The chief attraction of Maidstone is the River Medway. Up or down, as far as one likes to go, it will provide photographic work for weeks. East Farleigh and Barming, which can be reached by river, train, or tram, are places worth visiting. At East Farleigh and Teston there are fine old Tudor bridges, whilst the locks close by add to the charm of the places. Further up one reaches Watlingtonbury and Yalding, from five to eight miles from Maidstone.

Passing down the river one comes to Allington Castle, now being restored, where lived Sir Thomas Wyatt, who led the Kentish Rebellion in Queen Mary's reign. It is now the residence of Sir Martin Conway. Allington also possesses one of the smallest churches in England, and has the first lock on the river, below which it is tidal. A little farther down is the beautiful village of Aylesford, about four miles from Maidstone, where a battle was fought in Saxon times. An exceedingly pretty view of the river, old bridge, church, and village, can be secured from a spot very much favoured by the photographer. Further down the river lies Rochester.

Other places of interest are Detling, Sutton Valence, Malling, Sandling, and Boxley, all within easy reach of Maidstone. There are also several woods in the locality. Maidstone itself is an up-to-date town in every respect. It has all the modern improvements, a tramway and motor 'bus services to different parts of the country, and situated as it is in one of the most beautiful corners of England, every photographer should endeavour to pay a visit sooner or later to the ancient town. There are dark rooms at Messrs. Boots, 38, West Street; Messrs. Corfe and Sons, 5, Gabriel's Hill; and Messrs. De Ath and Dunk, at 46, Week Street.—B. S. H. GRANT.

STRANRAER.

Information about Stranraer and district will be appreciated.—H. J. PHILLIPS.

One of the principal attractions of Stranraer is the possibility which it offers of a very great variety of pictorial work. All round the country is very finely wooded; there is the beautiful Loch Ryan, while further afield is the magnificent cliff scenery of the Mull of Galloway, pretty glens and broad open moors—everything in nature that can delight the eye.

Most photographic workers who go there will probably prefer landscape to any other form of pictorial work, and all those that are so minded I would specially recommend to give particular attention to the estate of Castle Kennedy (four miles from Stranraer), belonging to the Earl of Stair, and open to the public on Wednesdays and Saturdays. Some splendid woodland and

loch scenery can be obtained here, the White and Black Lochs being well situated. By going on the days mentioned no permit is needed. There are also some fine woods in this locality, on or near the roadside, where the photographer can work at any time without fear of interruption. Very early on a bright summer morning these woods are a world of beauty.

Some six miles further on lies the sleepy village of Glenluce, situated on the slope of a hill near the river Luce, which offers many fine pictures, especially a mile or two higher up, beyond the ruins of an old abbey. The place is the scene of much of "The Bride of Lammermoor."

Leaving Stranraer in the opposite direction to Glenluce, passing Leswalt, Aldouran Glen is reached, and the margin of Lochnaw, a pretty loch surrounded by woods. Further on, at the edge of a tract of moorland, the road divides, one part going to Corsewall Point and Lighthouse and the other to Killantringan Lighthouse and Port Patrick. Both lighthouses are worth visiting, and are situated amongst some of the finest cliff scenery of these islands. Near the village of Port Patrick, perched on the top of a high cliff, are the ruins of Dunkey Castle, and near at hand is the beautiful Dunkey Glen, open to the public on Saturdays. At Port Logan, a village further down the coast, is the tame-fish pond, which should certainly be visited.

The excursion from Stranraer to Ballantrae should not be missed, and time should be taken to explore the locality, particularly the River Stinchar as far as Pinwherry.

Mr. Richard Ker, chemist, George Street, Stranraer, has a dark room, and the principal plates and papers can be bought in the town.—ROBERT RICHMOND.



Varnish for Labels.

Old celluloid films dissolved in acetone make an excellent protective varnish for the labels of bottles, etc. They should be added until the acetone is quite thick and syrup-like.

Bench Top.

A piece of good linoleum makes an effective covering for the work bench of the photographer. An occasional treatment with beeswax and turpentine, and elbow grease, keeps it practically impervious to solutions.

White Ink for Dark Mounts.

Chinese white	...	1 ounce
Isinglass	...	¼ ounce
Alcohol	...	1 drachm

The isinglass is soaked in cold water, squeezed out, and dissolved by heat, and the Chinese white mixed to a cream with water is added. More water may be used to thin the ink if necessary to bring it to the right consistence for use in a pen, and finally the alcohol is poured in.

How to Make a Rack for Dishes. By W. J. Horner.

Special to "Photography and Focus."

THE rack shown in fig. 1 is not difficult to make and fit up. It should preferably be situated over the sink in which the developing and fixing operations are carried on; the water draining from the dishes will then run away without making a mess, and the position will be the most convenient for taking down and replacing them as required.

One advantage about the form of the rack is that, no matter how carelessly a dish is put into it, it cannot fall out; but its lower edge will slip down the wire bars until it comes in contact with the lower wood rail. Another point is that, with the dishes put with their inside faces to the wall as

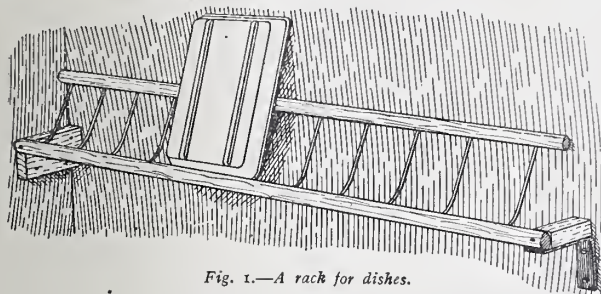


Fig. 1.—A rack for dishes.

shown, they are absolutely drained, and cannot dry in one part and retain sufficient liquid to remain wet for a long time in another.

The length of the rack may be fixed in many cases by the length of the sink or trough above which it is situated, or by that of a recess in the wall. Otherwise, the dishes to be accommodated will decide its length. If we suppose it is required to take two half-plate and two whole-plate dishes, then it should not be less than 2ft. 6in. long.

Its construction is shown in detail at A and B in fig. 2. It consists of a number of short lengths of wire uniting the two wood rails. This is done by boring a line of bradawl holes in each rail, into which the ends of the wires fit tightly. The wires should be about 2½in. or 3in. apart. Round rods of wood are best for the rails, but square might be used, the only objection to the latter being that it would be difficult to avoid having their faces more or less tilted in relation to the wall, which would be both unsightly and more troublesome to fasten. The wires are pointed slightly, and the entire set are first driven into one rail, and then the other is placed in position over the wire ends, the latter adjusted and entered into the holes, and the rail is then driven on to them as far as it will go. The rack then appears, in end view, as at A in fig. 2, the wires being straight and, of course, all cut to similar length before insertion. They are

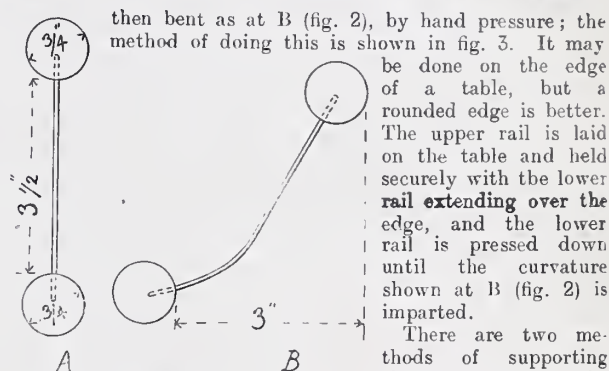


Fig. 2.

then bent as at B (fig. 2), by hand pressure; the method of doing this is shown in fig. 3. It may be done on the edge of a table, but a rounded edge is better. The upper rail is laid on the table and held securely with the lower rail extending over the edge, and the lower rail is pressed down until the curvature shown at B (fig. 2) is imparted.

There are two methods of supporting the rack against the wall. If it fits within a recess, a piece of wood may be nailed to the wall at each end, as shown at the left-hand side of fig. 1, and the lower rail may rest on and be nailed to these. The other method is shown at the right in fig. 1. A metal bracket is attached to the wall, and the lower rail of the rack is supported by, and secured to, the bracket. The most convenient method of attachment, perhaps, is (as shown) to screw a block of wood to the top of the bracket and to nail the end of the rack to it. At both its ends the rail end rests in a notch, so that the nail can be driven horizontally.

With xylonite dishes the rack has practically no weight to carry, but if heavy porcelain dishes are used, the fixture must be strong enough to sustain them without possibility of breakage. A wood block, as in fig. 1, can generally be

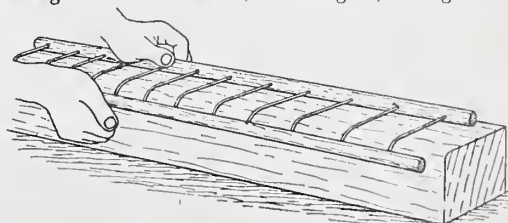


Fig. 3.—Curving the wires.

secured well to almost any kind of wall by nails. Long wire nails are best, and if driven carefully can be made to penetrate brick, though it is best to put them in mortar joints if possible. The alternative, with a brick or stone wall, is to drill ½in. holes about 2in. deep, plug them with wood, and nail to the plugs. In attaching a bracket this latter method is best. If the wall is of wood, or faced with wood, screws should be used in preference to nails.

Determining the Best Proportions of Gum, Bichromate, and Pigment.

SINCE the best proportions of gum, bichromate, and pigment are affected by the character of the gum, the pigment, and the paper, an easy method of ascertaining them becomes a desideratum. The following, quoted from "The Photographic Journal," is due to Mr. Wille:

I take a strip of the same paper that I am going to use, he said, and with a minim glass I measure out a definite quantity of pigment, and having shaken it up well coat a small section of the strip of paper. Then I take the gum solution and add an equal quantity of gum to the pigment in the minim glass and coat another section of the paper. Thus I keep on adding one part of gum after another until I get

up to about seven parts of gum to one part of pigment. The mixture must be well stirred after each addition of gum. The chart showing the mixture at its various stages is then dried under natural conditions, and when dry is floated in water. After floating for a little while it will be found that up to a certain point in the scale the pigment has entirely come off the paper. The proportion of gum and pigment determines the solubility of the latter and the extent to which it dissolves from its base. Thus the strip furnishes me with the correct proportion of the materials I am to use. If, for instance, I find that there is no pigment left on the paper after the mixture of four parts gum to one part pigment, I know that that proportion of gum and pigment will give me white paper

under my highest light, and I accept it as my standard. The determination of the effect beforehand by this test of the strip is a great advantage. The experiment, of course, has to be made afresh with each different pigment, and several differences will be noticed. Lampblack, for instance, will require a far larger proportion of gum than burnt umber before it is dissolved away.



Suggested Titles for Flower Studies.

WALLFLOWER.

"The yellow wallflower stained with iron brown."
—*Thomson*.

HAREBELL.

"The pliant harebell swinging on some grey rock."
—*Wordsworth*.

FLOWER-DE-LUCE.

"O flower-de-luce, bloom on, and let the river
Linger to kiss thy feet!"—*Longfellow*.

ROSE.

"Ah! see the virgin Rose, how sweetly she
Doth first peep forth with bashful modesty."—*Spencer*.

FORGET-ME-NOT.

"I move the sweet forget-me-nots
That grow for happy lovers."—*Tennyson*.

PANSY.

"There is pansies, that's for thoughts."—*Shakespeare*.

ROSE.

"The rose is fairest when 'tis budding new."
—*Sir Walter Scott*.

TULIP.

"The tulip's petals shine in dew,
All beautiful, yet none alike."—*Montgomery*.

DANDELION.

"Dear common flower, that growest beside the way,
Fringing the dusty road with harmless gold."
—*T. R. Lowell*.

SNOWDROP.

"First-born of the year's delight."—*Christian Year*.

MARIGOLD.

"The marigold, that goes to bed with the sun."
—*Shakespeare*.

JASMINE.

"My slight and slender jasmine tree."—*Morpeth*.

MAGNOLIA.

"The vast magnolia rends its roseate husk,
And opens to the dusk."—*Edmund Gosse*.

CROCUS.

"Yellow and purple and white,
Snow-white and lilac and gold,
Crocuses, my crocuses."—*Geo. Cotterell*.

JONQUILS.

"With bright jonquils, their odours lavishing
On the soft west wind."

ALMOND.

"The silvery almond flower,
That blooms on a leafless bough."—*Moore*.

TUBEROSE.

"And the sweet tuberoses,
The sweetest flower for scent that blows."—*Shelley*.

CAMELLIA.

"The chaste camellia's pure and spotless bloom."—*Roscoe*.

MIMOSA.

"Like the mimosa, shrinking from
The blight of some familiar finger."—*Whittier*.

LABURNUM.

"Laburnum rich in streaming gold."—*Cowper*.

BLACKBERRY OR BRAMBLE.

"The bramble bends
Beneath its jetty load."—*James Grahame*.

BROOM.

"The broom,
Yellow and bright as bullion unalloyed."—*Cowper*.

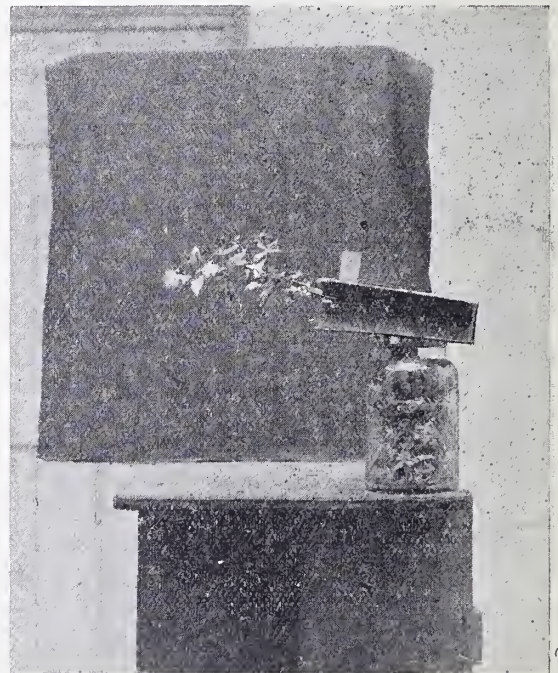


Apparatus Costing Nothing for Flower Photography.

FEW branches of photographic work call for less in the way of paraphernalia than does flower photography; in fact, it is no exaggeration to say, as is said in the title of this note, that the apparatus costs nothing. The arrangements which I myself use are to be found in every household, and can be pressed into the service of the photographer when required without interfering with their ordinary uses.



A large packing case stood upon one end makes a firm table for the subject. A board may be laid upon it to increase the distance between the flower and its background. The back-



ground itself is fastened to a drawing board, which is just leant up against anything that comes handy, and is heavy enough to support it.

Many flowers and fruit cannot be set up naturally in a

vase; the stem wants to be held horizontal and not vertical. The little photograph shows one very simple way of accomplishing this. A large jam glass is put on the table, and on this is laid a book. The stem is slipped between the leaves of the book in the desired position, and then a heavy weight is put on to grip it firmly. This arrangement answers particularly well in the case of catkins and pendulous blossoms. Should the stem be too short to allow the book to be well

out of the photograph, it may easily be lengthened by splicing another twig to it. If this is done with dark cotton it will not be noticed should any unavoidably appear in the picture. When a slanting position is required, the jar must be tightly packed with crumpled paper, and the stem securely wedged into this. The book may then be placed on the top of the jar, when it will press the stem firmly down.

CARRIE PERCIVAL-WISEMAN.

Amidol, a Universal Developer. By W. Harvey.



OR the past fifteen years I have been trying to make negatives, and through all that long time I have sworn by pyro-soda. I still have a strong affection for my old friend; but for some months I have been using amidol for negative work, and so far as my experience goes nothing can beat it.

Recently my son and myself visited Burnham Beeches. We took, between

us, three cameras—a half-plate, a 5 by 4, and a quarter-plate. We exposed four half-plates, six quarters, and two 5 by 4, and these were all developed in five ounces of freshly made amidol developer. The quarters were developed in pairs, the others singly, and there is no difference in the quality of the negatives between those developed first and last.

The following is my method of working. All that is required is two ten per cent. solutions, one of pure sodium sulphite and one of potassium bromide. My practice is to dissolve three ounces of the sulphite in a pint and a half of water, as the common pint and a half bottle found in almost every household comes in handily. The bromide solution is made by dissolving one ounce of potassium bromide in ten ounces of water and bottling it off. For developing half-plates, I pour out five ounces of the sulphite solution and weigh out ten grains of dry amidol. This is added to the sulphite solution, and the mixture briskly stirred until it has dissolved. A few drops of the bromide solution are added. I generally use two drops to the ounce. The developer will then be ready.

If the exposure is about correct, the high lights will begin to appear in about twenty seconds, and if factorial development is practised, and good plucky negatives are wanted, 18 may be taken as the factor. For gaslight papers, 16 or 17 will do; but, as I use bromide paper, I keep to the higher factor.

The same developer exactly is used for gaslight papers. For bromide papers the five ounces may be diluted to seven or eight.

It has often been said that amidol will not keep in solution, but there is less in this than is made out. I have recently used the same solution, forty-eight hours after mixing it up, with good results. But it should be employed like any other developer—that is to say, mixed fresh each time there is a batch of plates or prints to be developed, and the results will be satisfactory.

In addition to its other good qualities, amidol is clean working and cheap. An ounce of amidol costing 2s. makes 240 ounces of developer. I have never found it necessary to use more than two grains to the ounce. To those, then, who are on the look-out for a good, all-round developer, I have every confidence in recommending amidol.



A JUNE LANDSCAPE.

Awarded a Prize in the "Focus" Landscape Competition.

By JAMES BERWICK.



CRITICAL CAUSERIE.

By "The Bandit"

Concerning some Photographs by Beginners.

"Critics!—appalled I venture on the name,
Those cut-throat bandits in the path of fame."—BURNS.

"DEAL gently but firmly with me" is the command penned by the sender of a postcard entitled "The Long Aqueduct from Salter's Lane, Bearley." On the gentleness score I make no plea; but do I ever fail to deal firmly? I don't think so. Indeed, I am sometimes surprised that none of the victims of my banditry turn and rend me or lie in wait at Tudor Street with a bomb.

To be serious for a moment: Let me say here and now that if any soreness is ever caused by my remarks I am sincerely sorry. My criticisms are honest; and nobody who knows anything about the difficulties which beset the rash scribe who aims at honesty plus politeness will need any further explanation.

When I looked at the "Long Aqueduct" I almost unconsciously ejaculated, "Hard lines!" I was alluding neither to the photographer nor to myself; but to the picture. The exclamation, in short, was not meant for the usual slang interpretation, but literally. For the thing we call a photograph is made up, you know, by a variety of marks on a piece of paper—lines and masses, dark and light; and, whatever Mr. Euclid may have thought, we photographers know that there are hard lines and soft lines. A hard line is not necessarily one which is in dead focus, nor is a soft line invariably fuzzy. As often as not the quality of hardness or softness is decided by the shape of the line and by nothing else. Broadly speaking, a curve is a softer line than a straight. No one knows why a curve

should please the retina more than a straight any more than we really know why a rose pleases the nostrils better than sulphide toner. But these are truisms which may be conceded without a scientific explanation being forthcoming.

run quite at right angles, but tapers into the distance, the top of the aqueduct itself is the least unrestful line in the collection, although, *quid* line it would otherwise have been perhaps the harshest and ugliest. But the vital badness in the arrangement of these



In a Derbyshire Dale.

Well, the "Long Aqueduct" is full of hard lines, though I dare say some of them will vanish in reproduction. To begin with, there is the line of the aqueduct against the sky. Below this there is (apparently) a railway travel-

ling in quite a different direction. Below this, again, there are lines of wire fencing, lines of a stile, and lines of a gate; and below this, the line of the road where the photographer was standing, I suppose. All these lines run more or less horizontally at right angles to the spectator's vision, which is fault number one. Because it doesn't

lines is that none of them meet at a resting-place, or even look as though they would ever lead up to any important rendezvous of interest. They straggle: they rush away from each other into the inane, and drag the eye after them. It is perfectly possible to build a pictorial composition out of straight lines. Usually the composition is angular, or what is called pyramidal; but at all events, you may be sure that the lines meet, comfortably and finally, at some junction, and don't run out of the edges as do the lines in the print before us.

There is also too great a multiplicity of subject matter in this picture. It should have been either a photograph of the aqueduct, or of the railway, or of the lane, or of the tree stump, or of the gentlemen. It is all these at once; and too many ingredients have spoilt the broth as surely as too many cooks would have done.



The Long Aqueduct.

Straight lines are the keynote of "In a Derbyshire Dale"—the straight lines of the three prominent trees. I said above that the usual straight line composition was pyramidal; and at first glance this Derbyshire landscape may look like an exception. By mentally deleting the minor detail you will see that it is nothing of the sort. The three trees lean slightly apart; they are an inverted pyramid, standing on its apex; for the brain counts the top edge of the print as the base of the pyramid. The line of the pathway makes a pyramidal composition with the bottom of the print as base and a distant high-light as apex; and the river margin and banked hillside on the right suggest another pyramid. Now note this: The only flaw in the composition is the line which fails to conform to this rule, the line of the curved branch falling from the nearest tree. It hastens out all by itself, partly straight and partly bending, and it has no errand to perform as far as composition is concerned. Result: a jarring note, and a picture—otherwise charming—spoilt from an oversight of what one may call the rule-of-thumb technique of art.

Angles and curves, softnesses and hardnesses, are hopelessly peppered over "The Bridge," our third print. I never in all my life saw quite so irritating a composition—irritating because it is full of such "possibilities," yet so barren in the utilisation of them. Many an artist would have rejoiced to see that stream, backed with that large and dignified meadow, and the long, quiet stretch of hedgerow, topped by the mist-hung wood; but I doubt whether the greatest photographer living could have combined the elements into a complete whole from this particular standpoint. The foreground is

view-point might have separated them; but even so, the lines of both would have jumped out of the verge of the picture with unseemly suddenness. But that tilted hedgerow is, I fear, quite unmanageable; and the only remedy I can offer is to trim it off altogether and consign it to the wastepaper basket. Trim the print, that is to say, along the tops of the near trees, and you get at least a decent portrait of the bridge: comparatively well-balanced, too, for the arch itself is balanced by the clump of bushes

quently curves: perhaps that is why we enjoy them more than straight lines, which are man's. Observe the suavity of the curves in "The River Aire"



The Horse Shoe.

By A. T. Westbrook.



The Bridge.

By F. W. N. Fuller.

compared with the rudeness of the straight lines in "The Aqueduct." There is a splendid, leisurely sweep about the sandy shore of this placid Aire; and the photographer has chosen his position judiciously, for the curves meet, or at least there is a suggestion of their meeting, at a point just within the frame. There is a simplicity in the picture which I greatly admire, and though both the sky and its reflection are

far too staring a white, I can congratulate this worker on showing promise of an instinct for composition.

That curves are not always a success is illustrated by our last print, which is entitled "The Horse Shoe." Technically I do not criticise it, for its technique is all right. The curve here is the twin of the curve in "The River Aire," yet the Aire curve is beautiful while this one is, I won't say positively ugly, but at any rate it is utterly uninteresting. Why? Because we know the river didn't go like that on its own account. The curve is not nature, but an interference with nature: and while one might have made a picture out of a curve of a canal or railway line of this radius and arrangement, one cannot make a picture out of such a curve of river. Canal and railway are frankly man-made, so we expect, and can even admire, man-made characteristics in them. A river should breathe the very spirit of nature, and act according to nature's untrammelled laws—at least a river in sylvan solitudes such as these should do so, whatever the Thames at Blackfriars may do.



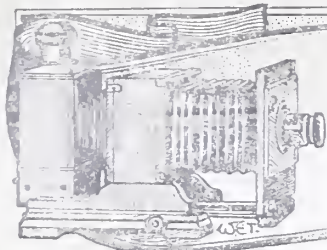
River Aire, Rawcliffe.

By E. B. Andrews.

fairly satisfying, but as soon as we reach the bridge rails we feel discomfort, for they precisely follow the line of the trees behind them, and are confused with it. A very much higher

at the left hand bottom corner; whereas at present the hedgerow topples everything into a hopeless capsizing of the entire composition.

Nature's own lines are most fre-



Waistcoat-pocket Cameras.

By C. V. Redwood. Special to "Photography and Focus."

IF the history of amateur photography is to be divided up into a series of epochs, then the present is certainly the age of pocket cameras. The bulk of the folding camera has been reduced and reduced, until now, when folded up, it is almost a solid mass, and until the Lippmann process of photography without a camera becomes an accomplished fact, it is difficult to see how much further portability and compression can be carried.

An article in *Photography and Focus* a few weeks ago, on the subject of big pictures from little ones, was sufficient to prove to anyone who may have doubted, that these tiny cameras and their tiny pictures are in no sense toys, but will yield enlargements which will hold their own against the work of far larger instruments. Many photographers, no doubt, will continue to favour the larger sizes; and it is not reasonable to suppose that the little cameras will ever supplant the big ones, which enable an image of a fair size to be seen and arranged on the focussing screen; but if they will not supplant them, at least they supplement them, as I hope to show.

No one can have been a photographer for long without having some experience of that "cussedness" of inanimate nature, which leads her always to put forward her most attractive and most photographable aspect just precisely when the camera is at home, or the supply of plates is exhausted. The sunset we have always longed to photograph is to be seen in all its glory as we trudge home after exposing our very last plate; the barge with sails outspread comes at the bend of the river in just the position in which we have always thought a barge ought to figure, when we are on some business errand where the carrying of a camera ostensibly

and undisguised is impossible. There is no need to multiply examples of our meaning. Every reader can, no doubt, supply them from his own experiences.

Here, then, is the true field for the pocket camera. By pocket camera, we do not mean, in this connection, any camera that can be got into a pocket, but the camera which is so truly portable that it can be carried *always*, with an adequate supply of plates, taking up no more room in the pocket than, say, a cigar case. Only a few of the so-called pocket cameras can be regarded as strictly within these limits, and we do not wish to decry the many excellent patterns that lie outside them. They, too, have their uses. But for the waistcoat pocket cameras there is, as we have endeavoured to show, a fine field of utility, and one which they alone can occupy.

For the last two years the writer has carried, almost without exception, such a camera and half a dozen small plates. It occupies no serious share of his pocket room, and no one would suspect that he had an efficient means of making a 15 x 12 photograph concealed about his person. Yet lying before him, as he writes, are several enlargements of that size, which, in point of detail, leave nothing to be desired, yet which had their origin in the tiny apparatus just mentioned. They record pictures which certainly would not have been obtained but for the pocket camera, for they were all taken at times when the use of anything larger was not possible.

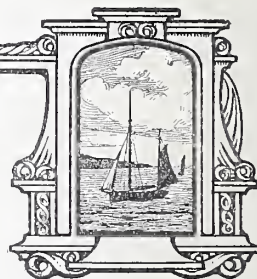
Perhaps this attempt to put forward the advantages of apparatus which have so fully proved their importance may lead some other readers of *Photography and Focus*, believers, like the writer himself, in large cameras in their place, to add a waistcoat pocket outfit, and to make an everyday practice of carrying it ready for immediate use.



Developer Stains on Negatives.

How they may be prevented, and how to remove them when they occur.

By J. Read. Special to "Photography and Focus."



DEVELOPER stains are more easily prevented than removed. If sufficient sulphite is present in the developer, no matter how great the tendency of the developing agent to stain, it will not do so. Few photographers are likely to make up their solution with too little sulphite at the start; but sulphite in solution rapidly deteriorates, and when once this deterioration has

taken place, the power which the sulphite originally possessed of preventing staining is diminished and finally lost and the negatives are no longer clean and of a good colour. To remove the stain and increase the speed with which they will print, it then becomes necessary to use what is called a clearing bath

Many different formulæ have been suggested for the purpose, some on the ground that they facilitate the removal of the substance which causes the stain, others because, although they do not remove it, they destroy its colour. Mr. Chapman Jones has advocated washing the stained negative in water rendered feebly alkaline, pointing out that the stain is more soluble in such water, and that acid baths render it insoluble and irremovable. The writer has never succeeded very well in attempts to remove stain by washing; and as the thing which one wishes to remove is the colour rather than the material which gives rise to the colour, there seems to be no reason why an acid solution, which at least decolourises the stain, should not be used. It must, however, be remembered that when a stain has been removed by an acid clearing bath, prolonged washing may bring it back.

The simplest of these clearing baths is a plain dilute

solution of hydrochloric acid. The negative which is stained should be placed in

Formalin	...	...	...	...	1 dram
Water	...	...	...	...	2 ounces

for a quarter of an hour. This is to harden the gelatine, which otherwise might be damaged by the acid. Then the plate is placed under the tap for a few minutes while the clearing solution is made up.

Hydrochloric acid	...	...	...	...	1 dram
Water	...	...	...	...	4 ounces

If the stains are not very bad, this will remove them in a quarter of an hour or so, and nothing remains but to rinse the negative for a few minutes and set it up to dry. I have found this treatment quite satisfactory in mild cases, particularly those in which the stain is not local, but is more or less of the nature of a discoloration of the image all over the plate.

It may be as well to point out here that when a negative, after fixing, is found to be stained, it should be washed thoroughly to get rid of the hypo, and then be treated to remove the stain, instead of allowing it to dry first. Many a stain which could be got rid of entirely, if the negative had been treated soon enough, will be found to be unattackable by clearing baths when once the plate has dried.

If the stains are bad, ordinary clearing solutions will not touch them, and they must be attacked with what are really bleaching agents. One of the best of these is sulphurous acid, and the photographer has it always at his command, since it is liberated as soon as a strong acid is added to a solution of sodium sulphite. The film of the negative may be hardened in formalin, as above described; and this is a good preliminary for any of these processes. The plate is then placed in a five per cent. solution of potassium metabisulphite, or else in the following:

Sodium sulphite	(crystals)	...	...	...	$\frac{1}{4}$ ounce
Water to	...	...	...	...	5 ounces
Citric acid	...	...	...	...	50 grains

One dram of sulphuric acid may be substituted for the citric acid if this is more convenient.

This stain remover has the advantage that it does not soften the gelatine film, and it may therefore be applied to a negative without the slightest risk of injury. This cannot be said of the following formula, which is the most powerful of all the stain removers; but, unfortunately, has a tendency to soften the gelatine, even if this has been hardened beforehand in formalin.

Bleaching powder	...	...	...	...	50 grains
Water	...	...	...	...	10 ounces

The bleaching powder is the common "chloride of lime" of the oil shop. Eight grains of caustic soda should be dissolved, and the liquid filtered just before use. The solution does not keep well, and

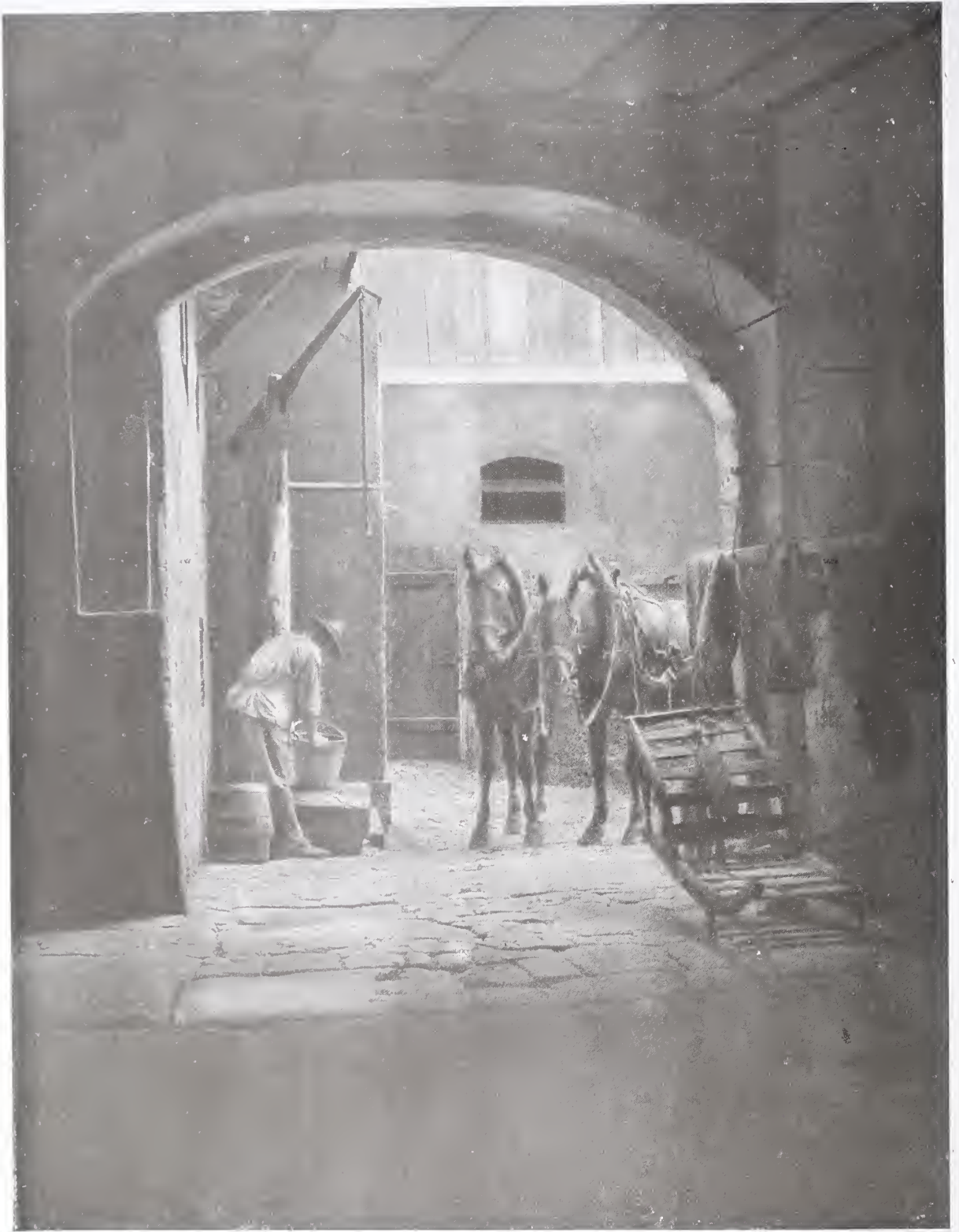
should therefore be made up as required. If it is allowed to act for a long time, the image of the negative itself may be bleached. In such a case the plate must be thoroughly washed free from all trace of the bleaching powder, and then be placed in an ordinary developer for negatives until it is once more darkened, when it may be washed and dried.

The worst stains may be removed by one or other of these baths, but I feel that I cannot do better than finish, as I began, by pointing out that prevention is much better than cure. Not only is the complete prevention of stain by the use of a suitable non-staining developer much less trouble, but it also does not involve a risk of injury to a valuable and perhaps irreplaceable negative, which all after-processes of this kind inevitably do.



A November Sunset.

By A. E. Cogion.



A STABLEYARD ROTHENBURG.

BY JAMES SHAW.

Imperial Orthochrome Plates

**An added
power**

in the hands
of the photographer.

They are
**specially
helpful**

at this season
of the year

when the reproduction of the beautiful

Autumnal Tints

is so important a matter in landscape photography.

Unrivalled
in brilliancy,
wealth of detail,
and
delicacy of tones.

Imperial P.O.P.

THE IMPERIAL DRY PLATE CO., Ltd., Cricklewood, London, N.W.

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and 5611, Holborn.

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	s. d.		s. d.
Twelve Months ..	6 6	Twelve Months ..	10 10
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Single Copy	1 1	Single Copy	2 1

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The Advertisement Manager, PHOTOGRAPHY AND
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send money to unknown persons may deal in
perfect safety by availing themselves of our
Deposit System. If the money be deposited with
PHOTOGRAPHY AND Focus both parties are advised
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and acceptance of the goods, the money is for-
warded, less a charge of 1/- for registration. The
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AND Focus, 20, Tudor Street, London, E.C.

10 CONTRIBUTORS.—The Editor will be glad
to consider original up-to-date manuscripts on
photographic subjects. All contributions must
be typewritten, or in very legible handwriting,
on one side of the paper only, and should bear
the name and address of the sender. Letters or
communications arising out of matters already
appearing in the paper are not paid for. The
Editor disclaims legal responsibility for the
safety of matter submitted to him, but he will
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when a stamped addressed envelope is enclosed
for that purpose. No notice whatever can be
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for publication, with or without letterpress, photo-
graphs of special interest, on terms to be arranged.

PAYMENTS.—Articles and illustrations are paid
for on acceptance.

INTERVIEWS.—The Editor will be at 20,
Tudor Street, on Wednesdays, between the hours
of 9.30 and 11.30 a.m., but can only be seen at
other times by appointment.



A COMPREHENSIVE CATALOGUE has
been issued by Messrs. May Roberts
and Co., of 9 and 11, Clerkenwell Road,
London, E.C. It is thoroughly up to
date, containing all the latest in photo-
graphic materials, and will be sent
free on receipt of 3d. for postage.

UNIVERSAL KINEMATOGRAPHY. Mr.
Urban in an interview recently said
that he hoped to see the time when
every school had its kinematograph.
We do not doubt it, but are suffi-
ciently old-fashioned to be believers in
the efficacy of the simpler forms of
corporal punishment.

A LITTLE BOOKLET descriptive of the
Dallmeyer camera has been issued by
Messrs. J. H. Dallmeyer, Ltd., of
Denzil Road, Neasden, London, N.W.,
which will be sent post free on appli-
cation. It gives particulars of the
"Penric," the "Ledon," the "Natu-
ralist's," and other of the apparatus
for which Messrs. Dallmeyer are noted.

Books for . . . Photographers.

Photography for All.

By W. JEROME HARRISON, F.C.S.
Covers the whole ground of photography
as practised in its most popular forms.
Cloth Bound 1/- nett. Post free 1/2.

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By G. T. HARRIS, F.R.P.S.
All the different processes described at
first hand by a practical slide maker.
Cloth Bound, Price 1/- nett. Post free 1/2.

The Hand Camera and what to do with it.

By W. L. F. WASTELL AND R. CHILD
BAYLEY.
Dealing with modern hand cameras of all
types and giving instructions for all forms
of photographic work involving the use of
a hand camera.
Cloth Bound 1/- nett. Post free 1/2.

The Platinotype Process.

By W. J. WARREN.
A complete, practical, concise and well
written treatise on what is the finest of the
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with facsimile developed and undeveloped
platinum print.
Cloth Bound 1/- nett. Post free 1/2.

Photographic Recipes and Formulae.

By R. PENLAKE.
Over 300 Formulae, Hints, etc. Reliable
and up-to-date.
6d. nett. Post free 7d.

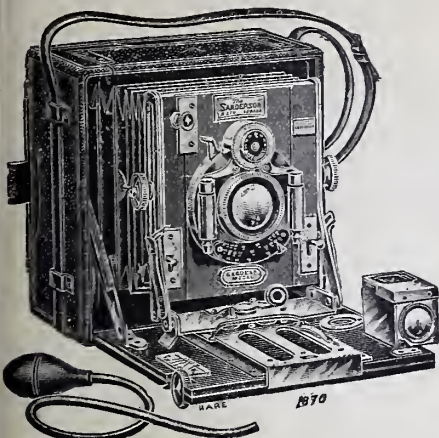
A full list sent on receipt of a postcard.
ILIFFE & SONS LTD.,
20, TUDOR ST., LONDON, E.C.

A CURIOUS PHENOMENON, it is said,
has been noticed recently in some of
the negatives of the stars with which
the attention of observatories all over
the world has been so largely occupied.
It is that in the course of time, owing
to some alteration in the gelatine coat-
ing of the plate, the images of the
stars alter their distances from each
other. If this is actually the case, it
may prove a serious matter as far as
the scientific value of the pictures
forming the atlas of the heavens is
concerned. The differences that have
been detected are only very slight, but
a very trifling alteration may destroy
the utility of the record completely.

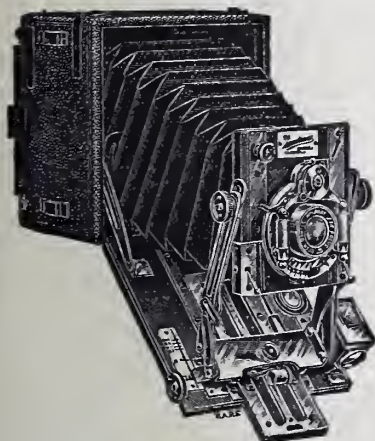
HOLIDAY DEVELOPMENT. Writing on
this subject in the "Glasgow Evening
Times," "Camera" says that for the
amateur who wishes to develop a few
plates on holiday the query is usually
now that is possible without adding
materially not only to the weight of
baggage but also including some un-
desirable glass bottles with chemicals
as well. These are all right if con-
veyed safely, and this can be done
when they are properly packed, but to
do this means to add more to the bulk
of material carried. An amateur tells
me that he has found compressed
chemicals suit admirably for the pur-
pose, and the photographer has only
to select his favourite pyro-soda or
other developer in this form when it
will be found that all difficulties are
met. The addition to the baggage is
small, the weight negligible, and
liability to breakage slight, as the
chemicals are properly packed so that
this may be avoided.

BURGLARY. Messrs. Newman and
Guardia's premises in Shaftesbury
Avenue, W., were visited between
Saturday night and Monday morning
(August 22nd-24th) by burglars, who
made an extensive haul of photographic
apparatus to the value of between £250
and £300. The property stolen con-
sists of the smaller description of
cameras, and we would therefore warn
our readers to be careful in buying any
"N. and G." apparatus offered them
second-hand, unless they know the
source from whence it comes. Appended
we give particulars of some of the
goods taken: One Zeiss Ser. I.C.
Tessar No. 8 lens, No. 85,943. Four
quarter-plate Sibil cameras, Nos. 254,
278, 282, and 283, with Zeiss Tessar
lenses. Six 3½ in. x 2½ in. Sibil
cameras, Nos. 213, 273, 274, 275, 276,
and 277, with Cooke lenses. Two 3½ in.
x 2½ in. Sibil cameras, Nos. 209 and
253, with Zeiss Tessar lenses. One
quarter-plate Nydia camera, No. 887,
with changing box, No. 1,106, Ross
Homocentric lens, and leather case. One
5 in. x 4 in. Wizard camera, with three-
foci rectilinear lens. Two Suter lenses,
Nos. 11,685 and 9,855. Two quarter-
plate N. and G. S.-R. Reflex cameras,
with Zeiss double Protar lens, etc.,
Nos. 2,051 and 1,949. Two changing
boxes for quarter plate Nydia cameras,
Nos. 1,270 and 1,381. One quarter-
plate N. and G. changing box. One
front of camera, quarter-plate Spec. B,
No. 1,310.

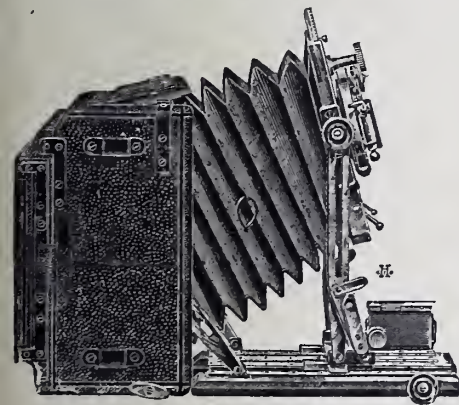
Why the "Sanderson" is so very much better than other Cameras.



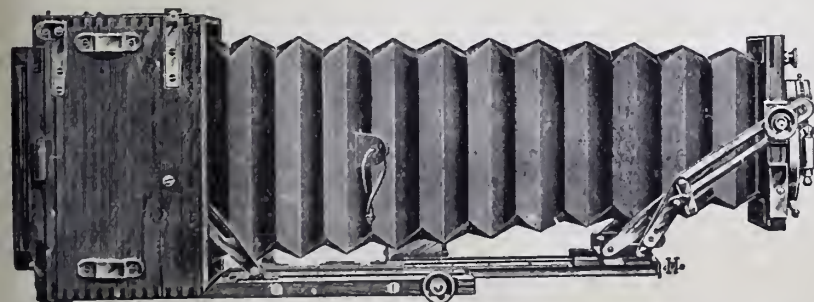
This is a Sanderson with the Lens in the normal position.



Here the Lens has been dropped by means of the Sanderson Front, to get an excess of foreground.



The Lens can be raised by the Sanderson Front to give an excess of sky.



Pictures may be doubled in size by extending the Sanderson Front and removing the front part of the Lens.

The Sanderson Universal Front is a patent, or rather a series of patents, any one of which would be useless without all the others. The Sanderson Front is called Universal because it rises, falls, recedes, extends, or **swings in a perfect arc at the will of the operator**, yet it can be locked rigidly and instantly in any position.

Then, again, the Lens is swung on its axis, and the locking nuts that control its movements are fitted at the end of the axial pins.

Each of the swinging Arms that carry the Lens front have one single slot that goes through in their entire length, and in these slots the axial supports of the Lens can pass freely up or down, backwards or forwards, **always preserving its balance, and ready to be locked rigidly in any position by a single touch**. All these wonderfully simple movements are patented.

The great point to remember is that in buying a Sanderson you are getting the finest, most famous, and most useful Camera that the world produces.

You are buying a most beautifully made Camera, one that will serve you well and can always be absolutely depended upon. You are buying a Camera with a reputation that is above reproach.

There are Field Cameras and Hand Cameras in the Sanderson series, and the prices range from

£4 4s. to £31 12s. 6d.

Call at any good Photographic Dealers and ask to see a "Sanderson."

Write for a booklet (stating whether you want a Hand or Field pattern) to the manufacturers:

HOUGHTONS

The largest manufacturers
of Cameras in the Kingdom,

**88/89, HIGH HOLBORN,
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PLEASE MENTION "PHOTOGRAPHY" WHEN CORRESPONDING WITH ADVERTISERS.

QUERIES AND REPLIES

REGULATIONS.—(1) Envelopes must be marked "Query," and the "Enquiry Coupon" found elsewhere must be enclosed. (2) The full name and address in addition to a *nom-de-plume* must be given. (3) Only one question on one subject is allowed in each letter. (4) Prints may be sent for criticism, but a separate coupon must be sent with each print, and a stamped addressed envelope (not loose stamps) for their return.

THE WEEK'S QUERY.

MAKING THE BEST OF UNDER-EXPOSURE.

I have some portrait negatives which are extremely thin, due to under-exposure. One or two are mere ghosts. I have tried intensification (mercuric iodide and sodium sulphite) with one or two, but there is very little improvement. I have heard of a method of copying, involving the use of black velvet, to obtain other negatives, but do not know the details. Please give me any information you can about this process and any other method that you think would be of use.—C. H. W. (Twickenham.)

The copying method is the only one likely to be of service. It is based on the fact that many details too weak to print will show up against a dark background if they are first whitened. The easiest way to whiten the image is by bleaching it in the mercuric chloride bath ordinarily used for intensification. The negatives must be thoroughly freed from hypo, and, to make sure of this, and at the same time to harden their films, it is well to soak them for a couple of hours in a five per cent. solution of alum. They are then washed in running water for half an hour, and are ready for bleaching.

The bleaching solution is made by taking a saturated solution of mercuric chloride, diluting it with its own bulk of water, and then adding three or four drops of hydrochloric acid to each ounce of liquid. The negatives are placed in this, and the dish is rocked from time to time until there is no doubt that the bleaching has gone as far as it can. They are then washed for ten minutes in running water, given two baths each of three or four minutes in hydrochloric acid two drams, water ten ounces, washed once more for five minutes in running water, and dried. When they are dry, they are placed on a piece of black velvet, and attached to an easel or drawing-board. They should then have all the appearance of a good positive picture, with all its details showing; and nothing remains but to get as good a negative from this as is possible by photographing it. If the photographer is accustomed to the use of thickly coated landscape plates, he cannot do better than use these, backed, for the copying; but if the plates he generally uses are of a more rapid kind, it will be better to employ them rather than some more suitable plate to which he is not accustomed. Provided the negatives are only thin from under-exposure, and are not fogged, this is a very satisfactory way of making the best of them.

REPLIES IN BRIEF.

BOBBY (Moston).—We believe not. Why not write and ask?

H. G. L. (Edinburgh).—Two ounces to the pint for ten minutes. They must be kept moving all the time.

INDO-FOREIGN AGENCY (Bombay).—We have no knowledge of the "Monopresse." It is hardly in our line.

QUA (Brentwood).—Ignoring price we should select 1.6 or 4 in that order. We cannot arrange them all in order of merit. There is little to choose between most of them.

J. S. DYSON (Brixton Hill).—We have no information. The print was by Mr. F. Whitaker, of 83, West View Terrace, Keighley Road, Skipton, Yorks. Why not write and ask him?

MISS HULL (Bournemouth).—Your best plan would be to treat the 50 mark as that for 8, the 25 as that for 11.3, and the 15 as that for 16. The differences are too slight to be appreciable in actual use. We are very glad to have your good opinion.

A YOUNG BEGINNER (Bockenham).—The gold tinge is no doubt fog due to the employment either of stale plates or of plates which have not been properly kept. If they are stored where the fumes of gas have access to them, they will soon show such a tinge.

NEW READER (Birmingham).—We cannot tell what is wrong with your camera, but we suspect the lens. Could you not get some friend who is a photographer to try it for you? The fault does not look as if it were yours, but it is impossible to say from the print.

P. LAMSDEN (Wood Green).—We do not think that you can do better than continue to use the stop and plates you are employing: using a smaller stop when taking anything in the nature of an open view, sea and sky, etc. The exposures you have been giving will be none too much for figure work, beach scenes, etc. Many thanks for the cutting. We have had other complaints about the colour, and are trying to get it altered.

TANK (Cricklewood).—The reasoning seems to be correct, and we should advise you to try the experiment as carefully as possible, and see how you get on. The only flaw we detect is in the 20 minutes at 65° for Kodak films or plates. If you are quoting from the Kodak instructions, you must remember that these refer to pyro-soda, while the other statements all refer to metol-hydrokinone, and one cannot draw conclusions about the latter from statements about the former.

L. E. BASTABLE (Dublin).—Thanks for your card, the answer on which we anticipated. The fault is in the plates.

WATERLOO (Harrogate).—No, it is not, theoretically, as good as ordinary backing, but in actual practice it is perfectly efficient.

B. M. (Willesden).—We cannot quite understand what you want to know, but 1/8 requires about one-third as much again exposure as 1/7.

G. J. HUGHES (Ballinakill).—Thanks for your kind note about the criticism. We have sent on your letter to our advertisement department at Coventry for attention.

LANTERN (Dundee).—If you cannot use a Nernst, which is certainly what we should have recommended, we can only suggest that you employ a 50 c.p. incandescent lamp.

BOWNESIAN (Bowness).—Messrs. Tylar, England, and Co. have amalgamated with Messrs. W. Butcher and Sons, Ltd., Camera House, Farringdon Avenue, London, E.C., to whom you had better send any communication about mounts.

G. FORD (Victoria, Australia).—We can only repeat our advice to you, always to use the largest stop, which will give you a sharp picture. By stopping down unnecessarily, the exposure is made longer, and the general effect duller and flatter.

INK (Huddersfield).—We succeeded very well with liquid "artist's" Indian ink, writing with a mapping pen on the gelatine film of a lantern plate, which had been fixed out without development, washed, hardened with formalin, and dried.

C. E. G. (Colchester).—If you register the copyright, you can at once stop any further sales; but, of course, you cannot prevent them from photographing the same subjects and selling cards of them. Whether they are half-tones or collotypes has nothing to do with it.

KINGSTON (Hull).—Good P.O.P. prints are made from the different negatives, trimmed, mounted on a dark card in the way shown, and the whole is then re-photographed on a 12 x 10 or larger plate, from which the prints you have seen were made in the ordinary way.

A. CRABTREE (Hebden Bridge).—We are afraid we cannot help you, as you do not give sufficient information for us to learn where you are wrong. The preparation given is what is generally used; we can only suspect that you are not using enough heat and enough pressure.

DAYLIGHT (Kingussie).—Yes, it is quite easy to use it by fitting a sheet of white card outside to act as a reflector. If the card is a large one, say 2ft. x 2ft. or thereabouts, and the sun does not shine either on it or on the negative, work can be done with such an arrangement at any time.

A. W. GILL (Edinburgh).—The apparatus would be quite as satisfactory as a complete enlarger, and would give as good results. The only advantage of the arc lamp would be reduced exposure. There is no satisfactory meter for the purpose: a trial exposure on a small piece of paper is generally made when the exposure is doubtful.

F. C. (Bray).—We quite agree with you as to the get-up. We do not know a strength which will act properly in 2½ minutes, and our own trials have quite convinced us that the Lumière formula is decidedly preferable to rodinal. The development should cease before the most exposed parts are quite black, and certainly while the least exposed parts are decidedly creamy.

A BEGINNER (Cambs).—You are clearly trying to work too far from your sitter. If you put the camera much nearer, the image will be bigger, and the focussing screen may be much further away. The supplementary lens does not convert the R.R. lens into a portrait lens, and if you can focus with your camera, as it is clear that you can, we do not see why you should attempt to use it. You will get on better without.

THE CEE (Finsbury Park).—The streaks and stains are due, no doubt, to lime salts present in the water. If when the washing is finished, you give the surface a gentle rub with cotton-wool while it is still under the tap, the negatives should dry clean enough. If they do not, the stains are due to oxidised developer, and may perhaps be removable with an acid clearing bath. We have an article on the subject in type.

NEGATIVE (Barnes).—Drying marks are very difficult to remove. The method of bleaching the negative right through with such a solution as

Potassium bichromate	90 grains
Sulphuric acid	1 ounce
Common salt	1
Water	10 ounces

followed by thorough washing and redevelopment with the same kind of developer as was originally used is said to remove them, but we have no experience of its efficacy.

LETO TITLING METHOD.

A simple and practical method of titling prints without destroying or tampering with the negative. DIRECT WRITING—NO REVERSAL.

By this method it is possible to reproduce one's signature in ordinary handwriting and printing simultaneously with the negative. The Leto Titling Method can be used also for the production of menus, programmes, and copying sketches, plans, etc., and if printed on Boardoids and plate marked give the appearance of copper plate engravings.



SOLD IN BOXES, COMPLETE
WITH TYPE CHART AND
GUIDE LINES

PRICE

2/-

No. 1 for $\frac{1}{4}$ -plate; No. 2 for 5×4 ; No. 3
for $\frac{1}{2}$ -plate.

LETO PLATE MARKERS.

A novel and simple method for giving a neat plate mark on masked Boardoid prints, greatly enhancing their value pictorially.

Made in the following sizes :

Series No.	Size of Plate Mark.	Packets contain	Price.
0	$3\frac{1}{2} \times 2\frac{1}{2}$ $3\frac{1}{4} \times 2\frac{1}{4}$	Two Plate Markers with Masks complete	1/-
1	$3\frac{3}{4} \times 2\frac{3}{4}$ $4\frac{1}{4} \times 3\frac{1}{4}$	do.	1/-
2	$4 \times 2\frac{3}{4}$ $4\frac{1}{2} \times 2\frac{1}{2}$	do.	1/-
2a	$4\frac{1}{2} \times 3\frac{1}{2}$ 5×4	do.	1/6
3	$6 \times 3\frac{3}{4}$ $6\frac{1}{2} \times 4\frac{1}{2}$	do.	2/-

For other sizes, ovals and circles, see full detailed accessory list.

LETO BOARDOID OUTFITS.

In order to better demonstrate the wonderfully artistic possibilities which the Boardoid method of photography offers, special outfits containing all necessary materials, such as plate marker, wide margin mask, cover mounts and Seltona Boardoids, complete with full directions are now obtainable. These outfits give an excellent idea of the process, after which plate markers and cover mounts can be obtained in sizes to suit all requirements.

OUTFITS ARE MADE IN

No. 1 for $3\frac{1}{2} \times 2\frac{1}{2}$ or quarter-plate .. 1/-
No. 2 for 5×4 or postcard size .. 1/6
No. 2a for cabinet size 2/-
No. 3 for half-plate 2/6

LETO COVER MOUNTS

(WITH TISSUE PROTECTORS)

Form the last word in artistic finishing of Boardoid prints, being effective, simple, and expeditious.

Series No.	Size.	Price.
1	$3\frac{1}{2} \times 4\frac{1}{2}$	1/- per packet
2	5×4	1/- "
2a	$6 \times 4\frac{1}{2}$	1/- "
3	$6\frac{1}{2} \times 4\frac{3}{4}$	1/- "

Leto Cover Mounts are made both upright and oblong, in dark art brown. Nos. 1, 2, and 3 are also made in dark art green.

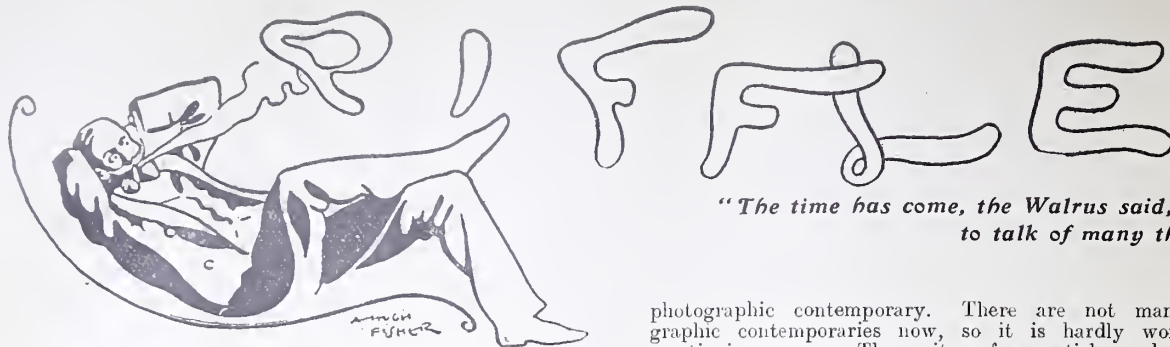
For other sizes see full detailed accessory list.

FULL DETAILED PRICE LIST (No. 15) POST FREE ON RECEIPT OF POSTCARD.

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*"The time has come, the Walrus said,
to talk of many things."*

EVER since I made the initial mistake of being born I have continued to make blunders of every conceivable kind. I have put my plates in the slides wrong side before, and put the lighted end of the cigar in my mouth. I have set my shutter to time for a race finish, and hammered my thumb in mistake for a nail head. This is not intended as a complete list of my mistakes, but as a sample of the mildest of them. When (as occasionally happens) I make verbal mistakes and am asked, "Why did you say so and so?" I find the easiest explanation is to return the classic answer, "Ignorance, my dear sir, sheer, unadulterated, sheepheaded ignorance." This saves a lot of trouble, and affords unbounded satisfaction to the abandoned wretch who has succeeded in convicting you of the said ignorance.

* * *

But while I am content thus to explain my own blunders I fail to see why I should be expected to account for those made by other people. Life is too short for that. The blunders made nowadays, in the everyday writing of English, for example, are multitudinous in number and stupendous in character. If I, as a small and idle schoolboy, had made some of the blunders that one finds day by day in newspapers and magazines, I should have found it advisable, from the point of view of comparative comfort, to have eaten my meals from the mantelpiece in preference to sitting down to them. Hence I am surprised that a reader should have sent me an extract from the advertisement of a photographic dealer and ask me to explain or justify it. I didn't write the advertisement. After enumerating a long list of cameras the announcement went on to state, "These cameras can only be seen at our Sloane St. branch." My correspondent wishes to know why it is that they can only be seen and not so much as handled or, peradventure, purchased. He ought to go down to the Sloane St. branch, and after looking round and asking questions of the staff for a few hours, remark, "Well, I really wished to purchase a thousand pounds worth of these cameras, but as you distinctly state that they are only to be seen I must wish you a merry Christmas and toddle off." If they didn't set the dog on him it would only be because they haven't got one in stock.

* * *

Of course the ambiguity arises from the misplacement of the word "only." If they had said, "Only these cameras can be seen at our Sloane St. branch" it would have meant what they didn't mean also. Had they put it, "These cameras can be seen only at our Sloane St. branch," it would have been what they intended to convey, but at the same time I doubt the truth of it; because if a man had gone into another branch with a sack of sovereigns and announced that he wanted on the spot some of the Sloane St. cameras they would have been sent on to him by telephone quicker than he could have shinned out of the shop.

* * *

It is inattention of this sort to the correct sequence of words that has given us such immortal examples as the advertisement, "Piano for sale by a lady with beautifully carved legs"; or the epitaph on a tombstone, "This stone was erected to the memory of John Smith, who was shot as a mark of respect by his brother." A similar disastrous context was afforded in the placard displayed in a photographic dealer's window, "Why go to other firms to be swindled? Come to us!"

* * *

While on this question of fearsome blunders I may recall a statement which appeared recently in the columns of a

photographic contemporary. There are not many photographic contemporaries now, so it is hardly worth while mentioning names. The writer of an article explained with much elaboration that on a certain occasion he gave an exposure of $\frac{1}{40}$ of a second instead of $\frac{1}{50}$ and he went on to state his reasons for giving an *extra tenth* of a second. Perhaps he will now explain how he gave an extra tenth, or even a tenth at all, when his total exposure was only $\frac{1}{40}$. To an untrained arithmetician like myself the difference only appears to be $\frac{1}{200}$ of a second. I cannot but admire, first of all, his childlike faith in his shutter if he thought it was going to fiddle about differentiating between two such exposures. It must be an exceptionally conscientious shutter if it did. He gave the extra bit of exposure (or thought he did, though no doubt his shutter could say something about that), for the purpose of getting extra detail in the shadows. But an exposure of $\frac{1}{200}$ of a second given alone would probably have registered only the sky and the high lights; which seems to show that he was only piling up light action just where it was not wanted. And if anyone now sails in and states that it follows from this that it is of no use lengthening exposure to secure shadow detail I can only advise him to pop off and stand on his head for five minutes in a pail of water. It is an excellent remedy.

* * *

In the short interval of time and space represented by that last row of stars, I have been to a photographic dealer's and have there been brought face to face with another blunder of a sad and serious nature. I refer to the differential treatment of customers. Having purchased one of my usual loads of plates and other material, I was not only compelled to pay for it, but was actually allowed to carry my burden away myself, although it was so heavy that my arm was stretched like a bit of cheap elastic. Now there stood next to me at the counter a young lady exceeding fair. She was faced across the counter by a young gentleman also of prepossessing and almost intelligent appearance, who rightly considered it a pleasure to wait upon the fair damsel. She bought no plates or other bulky and weighty rubbish, but was merely in need of a lens cap. The young man declared that he had not one of the right sort in stock, although I believe the scoundrel had it in his pocket all the time. After the pair had made goo-goo eyes at each other across the counter for the space of some few glad seconds he told her that on the morrow he would truly and faithfully bring the cap to her himself. He would not entrust it to the carrier or the railway, but would joyfully bear it to her with his own hands. And she departed smiling. What I want to know is this—if I were a fair maiden would that chap have let me groan under my burden? I trow not. But I contend that this different treatment is a bad blunder. It gets into the papers, you see.

THE WALRUS.

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PHOTOGRAPHY. SEPTEMBER 8TH, 1908.

PHOTOGRAPHY

A JOURNAL FOR EVERY CAMERA USER.

EDITED BY R. CHILD BAYLEY.

PUBLISHED WEEKLY.

SEPTEMBER 8TH, 1908. TUESDAY. No. 1,035. Vol. XXVI.



GOOSEBERRIES.

BY E. J. BROOKING.



Autochrome Work.

On another page this week we give an article by Mr. Alfred Watkins, of meter fame, describing the methods he adopts in his own Autochrome work. The process continues to interest and attract a great number of workers, both in this country and abroad. In the United States autochromy seems to be in very much the position which it occupied here some six months ago. In a letter to hand from Mr. Stieglitz recently, he said that he was having trouble from emulsion streaks—faults which seem to be unknown in this country. Frilling, too, has been bothering them across the Atlantic. “Unless I use formalin,” he writes, “every plate frills upon second development; of course the use of rodinal is partly the cause of this phenomenon. Still the humidity, which is often oppressive over here, together with the fact that the running water I use here is about 70°. is sufficient cause for frilling. I use the formalin after reversal, using a strength of two per cent., and leaving the plates in the bath from one to two minutes. I dry, after having rinsed the plate, and then varnish the edges. This is done to prevent lifting of the tanned upper film, which sometimes occurred without plates having been varnished on the edges. Having taken these precautions, one can do with the plate what one likes, and it stands all sorts of rough handling. It may be possible that the plates, when fresh, are less liable to frill. We get plates over here marked, for instance, ‘To be used not later than the end of June.’ They come through the Custom House at about that time.” The Custom House delays in the U.S.A. must be experienced to be realised. It is only fair to the manufacturers to point out that the Autochrome plates now on the market over here have proved themselves, in our hands, to be quite free from any tendency to frill, and that without any precautions whatever being taken.

Special Plates for Special Work.

We should like to utter a word of caution to those of our readers who are comparatively inexperienced in photographic work. It is to warn them against sup-

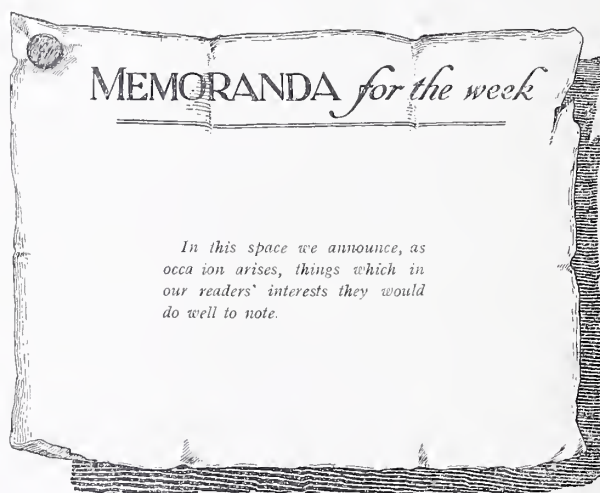
posing that special forms of photography require special brands of plate. There are landscape plates, and portrait plates, plates for copying and photomechanical work, hand camera plates, and so on, and it is quite natural to assume that the beginner who wants to do portrait work, let us suppose, will get on better with portrait plates than with plates sold as “landscape” or “hand camera” plates. This is quite a mistake. If he were going to do portrait work and nothing else much, then it would be wise to buy a make that was put forward as specially suitable for portraits, and so on with the other branches. Other things being equal, the plates made for such work are more suitable than the others. But in the case of the beginner other things are not equal. He has managed to get some little

experience of photography using a hand camera and some special fast brand of plate, and if he gets some portrait plates because he wants to take a few portraits, he will do worse work instead of better. He is wasting what experience he has got, and has to learn the peculiarities of a fresh brand. He would do much better by keeping to the plates of which he already knows a little, even if it is only a little that he knows.

Very much the same applies to developers. We are often asked what plates and what developer we recommend for some particular work, to which we can only reply that we recommend both the plates and developer to which the photographer is accustomed. Except that photomechanical plates are too slow for hand-camera and similar work, almost any plate can be used for any class of work—not perhaps to give the very finest possible results, but at any rate to give a far better result than a more suitable plate would yield in inexperienced hands. It is sound advice to stick to one make of plate and one developer for work of all sorts until both are completely mastered.

Home-made Acetylene Apparatus.

Safe as the manufacture of acetylene may be in apparatus properly designed and made for the purpose, there can be no doubt that the process is a risky one when conducted in ill-designed or unsuitable appliances.



Only a fortnight ago an inquest was held on the body of a costermonger who was fatally injured while trying to make acetylene in home-made apparatus. The whole arrangement exploded and fractured his skull. Acetylene, it should be remembered, unlike ordinary house gas, does not require the presence of air before it can explode. If the conditions are favourable, the gas may decompose with a violent explosion, although it is quite free from oxygen. The safeguards are ordinary care and suitably-constructed apparatus; and the freedom from accidents with acetylene, when the wide use of the gas is taken into consideration, shows how efficient these safeguards are.

It stood in a dealer's shop window, in glorious, scintillant pride,
With cheaper, inferior cameras around it on every side,
Its value was thirty-five guineas; a camera fit for a king;
It took a deep breath; filled its bellows; and lustily started to sing.

"Behold me, a splendid creation, my woodwork well finished and strong,
I'm perfect in every detail, with a shutter that never goes wrong,
My bellows are superfine leather, my movements work smoothly and sweet,"
Then, looked with an eye anastigmat, in scorn at the crowd round his feet.

The cameras round, made obeisance, some "magazines" opened their "flaps,"
To gaze with a wond'ring meniscus; the lenses all took off their caps.
A "magazine" priced at a guinea, replied to the one superfine:

"In the hands of a capable worker, my efforts may come up to thine."

The "splendid creation" laughed loudly, and shook on his well-plated legs,

"A gim-crack arrangement like you, friend, could never produce decent 'negs.'"

A hand from the back seized the fine one, thus ending his bitter harangue;

The poor "magazine," choked with feelings, let down all his sheaths with a bang.

Fitzsnooks bought the "splendid creation," and bought some experience, too;

He found it so very fatiguing, to think of the things he'd to do;

So he toyed with the fine apparatus, for a week, then gave up in disgust;

And the value of thirty-five guineas was left to decay and to rust.

The "magazine," too, found a buyer, who studied it first with great pains,

And balanced its limited uses, by unlimited use of his brains.

So laurels to him were conceded, for the work he turned out was the best;

His pocket provided the guinea, but his noddle provided the rest.

The Care of a Lens.

The price of a first class lens is no mean figure; but the photographer who invests in one has at least certain compensations which may reconcile him to the outlay. For one thing, he is getting an instrument of extraordinary quality, and of a quality which will manifest itself to him as he uses it. For another, a lens is an instrument which is absolutely unaffected and uninjured by use. At the end of many years of hard work it should be in every way as good as when first bought. If it is not so, it has suffered, not from use, but from abuse. This may be brought about in several ways, but the most frequent cause of injury is a blow or pressure, suffered when the lens is not actually in use, but is lying in the camera case. It ought always to be so packed that this is impossible. A wash leather bag such as is often used is a poor protection for a valuable lens. A stout sewn leather case is better, but a turned wooden box with a well-fitting lid (such as can be purchased from most chemists to hold a bottle) is the best of all. Such a box may be lined with card and velvet until the lens is an easy fit in it, and a bed of cotton wool at the bottom, against which the end that is not protected by the cap should lie, will serve to make all secure. A shilling spent in this way will be very likely to save pounds in depreciation in the value of a high-priced lens.

THE WEEK'S MEETINGS.

MONDAY, SEPTEMBER 7TH.

South London P.S. Conversazione.
Walthamstow P.S. "Toning Bromide Prints." S. B. Goddard.
Bradford P.S. Exhibition of Slides.
Southampton C.C. "Hints on Preparation of Exhibition Work." A. E. Henley.
Bowes Park & D.P.S. Lecture. P. Bale Rider.

TUESDAY, SEPTEMBER 8TH.

Paisley Philosophical Institution. Jerviston Estate.
Darlington C.C. "Five Minutes' Papers on Hints." H. L. Thomson.
Nelson P.S. Slide Evening.

WEDNESDAY, SEPTEMBER 9TH.

North Middlesex P.S. "How to Work the Optical Lantern." H. Stuart.
Leeds C.C. Members' Exhibition of Prints.
Southampton C.C. Romsey and its Abbey.

THURSDAY, SEPTEMBER 10TH.

Barrow-in-Furness Naturalists' Field Club. Cartmel.
Northamptonshire Natural History Society and Field Club. Fratton-British Exhibition.
Blackburn & D.C.C. Balderstone Woods.

SATURDAY, SEPTEMBER 12TH.

Liverpool A.P.A. Mount Wood, Stretton.
Barrow-in-Furness Naturalists' Field Club. Woodland and Heathwai e.
Maidstone & Institut. C.C. Hethfi ld.
U. Stereoscopic S. Wimbledon Common.
Photo Art Club (Aberdeen). Parkhill.
Stockport P.S. The Etherow Valley.
Wallasey A.P.S. Chester.
Northamptonshire N.H.S. Harleston Village and Firs.
Windsor P.S. Fiv Harbour.
Leeds C.C. Bolton Woods.
Attercliffe P.S. Tinsley Park Wood.
South Suburban P.S. West Wickham.
Walthamstow P.S. High Beach.
Woolwich P.S. Golders Green.
Glasgow & W. of S. San tbn-uk for Glenmaison.
Rounville & D.P.S. H. well Grange, Bromsgrove.
Bristol P.C. Clevedon.
Catf rd & Forest Hill P.S. The Inns of Court.
Preston C.C. Barton, for Canal, etc.
Ashton-under-Lyne. Alderley.

MONDAY, SEPTEMBER 14TH.

Attercliffe P.S. "Ozobrome." Horace Nixon.
Wallasey A.P.S. "Lantern Slide Making." C. G. McCaig.

Societies will have their meetings announced here if the syllabus is sent to us at the beginning of the Session, or from time to time.



A CRITICAL CAUSERIE.

By "The Bandit"

Concerning some Photographs by Beginners.

"Critics?—appalled I venture on the name,
Those cut-throat bandits in the path of fame."—BURNS.

THE word "snapshot" is often used in a derogatory sense; yet I really don't see why this need logically be so. When in my callow youth I pored over the printed records of Buffalo Bill and similar heroes of the West, I used to read: "The intrepid scout leapt to his steed, simultaneously taking a snapshot at the wily Redskin, who bit the dust . . ." (etc., etc., *ad lib.*) In this connection, you see, the shot was considered laudable. Why? Because, notwithstanding its haste and the unpreparedness of its aim, it hit the mark.

Similarly, in photography, you have to hit the mark if you are to justify your shot. If "snapshot" is a term of reproach, be sure this is due to the failure of the snapshot more than to the primary fact that it was a snapshot. Success, in short, is a sufficient excuse for the most hurried and apparently slapdash and unconsidered procedure. "Snapshot" is a complimentary enough term when the snapshot "comes off;" it is because the average snapshot most emphatically does not come off that the word has become contumacious.

Snapshots are of three kinds—(1) those which don't betray the fact that they are snaps because they might equally well have been done by a leisurely time exposure, (2) those which

betray the fact that they are snaps by their various typical snap faults, and (3) the premier class which betray the fact that they are snaps by reason of their fine success in rendering a subject which plainly could not have been got photographically by any other means than by snapping.

The first class is negligible. The third class is so rare that it is difficult to find a perfect specimen of it, to use as an illustration. A nice print called "A Back View" is, however, a fair case in point, and I reproduce it herewith, though not with the object of holding it up as a paragon. Still, it tells a simple story unaffectedly, and there is a good deal of character in each of the children's backs, and not a little quiet humour in the rendering of them thus. A distant tree unfortunately appears to spring like a spray of feathers from the cap of the central lad; this, then, is a detail which betrays the snap nature of the picture, for obviously, with a stand camera one

may take it for granted that so skilful a photographer would have noticed this small flaw when focussing.

On the other hand, the merits of this particular little picture betray its



A back view.

By W. W. Knowles.

snap origin even more loudly than this one minute defect. Obviously, the erection of a stand camera behind these children would have attracted their attention, and they would have looked round; or, even if persuaded to stand with their backs to the lens, the backs aforesaid would have lost their naive unconsciousness. Here, therefore, is a snap of the Class 3 genus, inasmuch as it at once proclaims itself as a picture unobtainable except by snapping, and amusing or quaint or lifelike just in so far as it is a snap and not a posed affair.

Compare it with "Irish Farmhouse," which is apparently a wayside snap taken—let us guess—when on a cycling tour. See the self-consciousness of the whole business! Why, the only figures in the view which aren't intensely aware of the camera are the pigs—and you'll observe that they're far and away the most felicitous part of the picture in consequence. Now if your figures are by their attitude frankly to confess that they know a camera is pointing at them, why then you might as well use a tripod and a focussing cloth—they'll do every atom as well as a snap; nay, better.



Irish Farmhouse.

By J. C. Carter.

This "Irish Farmhouse," then, I judge to be, taken on the whole, an example of Class 1. Stalked craftily, this dwelling and its very lively yard might have made a noteworthy example of Class 3; but what with the emissary in knickerbockers and the stiff group at the door, the whole thing resolves itself into a memento not of an Irish farmhouse, but of the sudden intrusion of

one that it attracts the eye and monopolises an undue quantum of interest.

Thus, the nearest of these three fishers if he had been standing up would perhaps have looked ugly; he would perhaps have repeated too insistently the vertical lines of his two companions, and thus made the composition monotonous; and maybe these reasons occurred to the photographer, and that was why he chose this particular moment for pressing the button. Theoretically he was right; in practice he was wrong, and has spoilt his picture.

The pose of the nearest man is—well, unhappy. It is lumpy and *bizarre*; and, moreover, it is unrestful—and this picture should have aimed at restfulness at all costs. One longs to see that poor fellow stand upright again and cease straining to



On the borders of the Lake of Geneva.

By H. A. Rossler.

strangers with cameras, and the sad result thereof.

Class 2, as I have said, betray their snap birth by reason of their typical snap faults. "On the Borders of the Lake of Geneva" is an average representative case of this. To begin with, it is severely under-exposed, for even though the figures of the fishers may have looked dark against the evening sky (and it wasn't very late evening, either), they didn't look like marionettes cut out of black paper with a pair of scissors.

Under-exposure, I may add, is the very nearly universal fault in the Class



The Wansbeck, Morpeth.

By E. B. Andrews.

maintain this uncomfortable posture. To watch him makes one fidgety. Thus, although the photographer has had the taste to appreciate a nice cloud effect, and, indeed, a nice subject as a whole, chance has condemned him to produce a mere Class 2.

The snapshotter, in a word, must cultivate an eye for composition, and a very quick eye, too, inasmuch as the composition of moving subjects changes in the fraction of a second

from its best to its worst. I have unfortunately not been able to find in my batch of prints an example of quite flawless instantaneous seizing of a composition, so have had to put up with a second best in the shape of a print which the photographer entitles "The Wansbeck, Morpeth."

It may really be stand camera work; no matter, the thing I want to draw your attention towards is the boat which occupies what would otherwise be a blank and obtrusive patch of white at the lower edge of the view. That boat saves the picture from being the barest piece of topographical registration. The photographer saw that the boat was right; he saw that he had to snap it then or never. A minute or two previously it would have been too low down towards the margin; a minute or two later it would have gone too far up. For that one instant of time the composition, though not ambitious, was at least at its best, and he profited by his chance.

"And what is so rare as a day in June" is the poetic title of my final print. This time the photographer has been so eager to seize his subject that he has not taken nearly enough trouble to think how best to represent it; and the result is that he has included in it an iron fence which I am sure he does not admire at all, though he has given it a prominent position. Not only is there a fence, but, to the right, a mysterious frame of wire netting. These things are, in themselves, hideous and banal; and they ought not to have any part in a rendering of the rarity of a day in June. No forgiveness can be bestowed on the careless inclusion of such a muddle as this; no excuse is valid.

The author of this print has no right to fix covetous eyes on the beauties of haymaking and overlook the ugliness of his foreground. He must study the art of noticing the stuff which is going to mar his picture as well as the stuff which he thinks is going to make it. He must learn to see with the camera's eye as well as with his own. Otherwise—as the camera will soon teach him—he will find that even a day in June and a hayfield may be rendered too literally to be beautiful.

Bronzine Frames.

A SAMPLE of some frames for photographs, known as Bronzine Art Metal Photograph Frames, has been sent to us by Messrs. John J. Griffin and Sons, Ltd., of Kingsway, London, W.C. The frames are made of metal, of a simple and neat design, and of a dull bronze colour, which will be found to harmonise very well with photographs either of the plain black and white character or sepia-toned.

These frames are at present supplied in cabinet and postcard sizes, the latter being made with a reversible foot so that the frame will stand up with the picture either horizontal or vertical. Although these frames are well finished and of good appearance, they are by no means high-priced, the cabinet size selling retail at 1s., and the postcard size at 9d., glazed all ready for use. They form quite an effective way of displaying one's favourite prints, and we have no doubt will appeal to many of our readers.

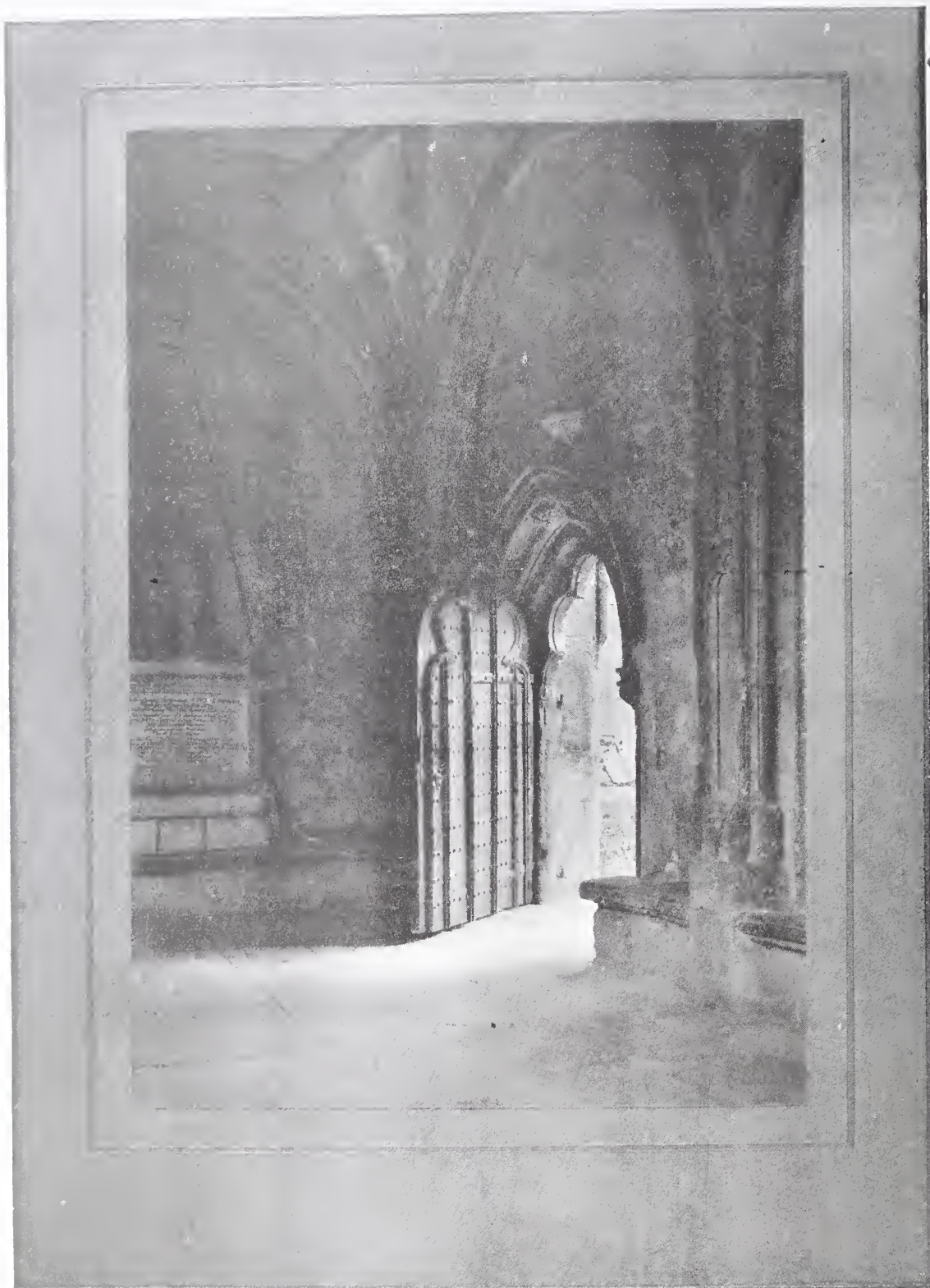


"And what is so rare as a day in June!"

By Herbert E. Bill.

2 snapshot, and I need not dwell on it, for we are all acquainted with it already; alas, only too intimately.

A second common fault in a Class 2 picture is the presence of a figure or animal which, while it is in a profoundly natural and un-self-conscious pose, is nevertheless in such a grotesque



WELLS CATHEDRAL: A CORNER OF THE CLOISTER (SEE PAGE 371).

BY F. H. CLIFFE.



The Seven Stages of Landscape Photography.

BY W. D. REID.

Special to "Photography and Focus" (continued from page 329).

The taking of a landscape photograph may be considered as the performance of seven successive operations. If these are done methodically and systematically, there is much less risk of failure. Our contributor gives a series of valuable hints under each of the seven headings.

WHEN the camera has been set up, the serious work of making a landscape photograph confronts us, and in this, the second portion of this article, we will consider in order the remaining five stages of the operation. We will suppose that the photographer has settled in his mind that where he is there is a picture to be obtained. His next stage is—

3. Deciding the PRECISE Position of the Camera.

Most of what might be written under this head belongs, strictly speaking, to the region of pictorial photography, selection of the subject, and so on; but there are a few points which come under the head of method. Too great haste to expose means that we have no guarantee that the best position for the camera has been found; and it is better to spend half an hour in settling this than to note immediately after exposing a plate that if it had been moved a little up or down, or twisted this way or that, a much better result might have been got.

Something has already been written about lowering the camera to secure a more prominent foreground. This also foreshortens any horizontal surface very considerably, and is useful when an unbroken expanse of water, or perhaps of meadow, takes up too great an area of the picture. Tipping it up or down—which cannot be done in architectural work unless the swing back is used to prevent distortion—may be quite freely indulged in in landscape work generally. The swing back need only be used when it seems to be necessary, as in most of such cases the distortion of the landscape is quite unnoticeable.

The lens at this stage should have its largest opening. If it seems at all promising, the

effect should be tried of unscrewing half the lens and using the back or front combination by itself. It is quite a mistake to suppose, without trial, that it does not much matter in the case, let us say, of a rapid rectilinear, whether it is the front or the back lens that is used. Even when nominally of the same focus, or it is tacitly assumed that they are, it will be found that they frequently are quite different, and the difference may be so great as to give us virtually three distinct lenses—(1) the front half, (2) the back half, and (3) the complete combination. Even if they are not so different as to be of any great advantage in this way, they may differ in the quality of the definition they give. We are generally recommended to use the back half

of the two, or, if we use the front half, to screw it into the position of the back half, so as to have the lens between the stop and the plate. It is sometimes possible, by changing the position of the front lens like this, to use it with a larger stop and yet get as good definition, but the difference is not very great. On the other hand, if the camera is only just long enough for us to use half the lens at all, if whichever half we propose to use is inserted in front of the stop instead of behind it, no perceptible difference is likely to be detected in the definition, while we get an extra extension by the length of the mount, and that is often a very useful thing. In cameras with a central swing back, an extra quarter of an inch or more can be got by extending the back as if it were going to be swung.

4. Focussing.

So much has been written at different times on this topic that there is little need for adding to it. As far as the stop is concerned, the largest that will give the desired degree of sharpness is the one to be used unless there is some very



THE DOCK.

By J. WALLACE ANDERSON.

Awarded a Certificate in the Beginners' Competition for May.

good reason for doing otherwise. If the exposure under such conditions is just so short that it cannot be given very reliably with the hand, but is a little too long for the shutter, it is better to use a smaller stop. Half a second given by the hand may easily be fifty per cent. wrong, whereas four seconds may easily be accurate to within ten per cent. or less.

Out of focus objects should always be looked for right in the foreground, where there is most likely to be trouble from such a cause, and where, if anything is blurred, it will be much more conspicuous than in the distance. A very good way to ensure sharpness with as large a stop as possible is to rack the lens in, first, until the distance is sharp, and then to rack it out as far as can be done without making distant objects too indistinct. The foreground detail should then be examined, to see if it is sharp also. If it is not, the next size smaller of the stops must be used and the operation repeated.

Focussing is made needlessly difficult by the use of too small a focussing cloth. It should be wide enough to go right round the camera, and be held underneath it in the left hand, leaving the right free to do the focussing. It should be long enough to allow the head to be eighteen inches at least from the ground-glass, so that a general view of the subject on the screen can be got. Many a picture is spoiled from the photographer keeping his face too close to the focussing screen: he sees each part distinctly enough, but he does not get a good idea of the whole, as a whole. If the focussing cloth is not only long enough to do this, but will cover the camera with a bit over to be folded down in front, and provided with a hole through which the lens may be pushed, so much the better.

If an orthochromatic screen is used, the focussing is most easily done without it, but a good look should be given to the ground glass after putting the screen in position to make quite sure that it has not affected the definition. The last operation, after focussing, should be to tighten up the different screws on the camera, including the tripod screw, so as to leave it firm and rigid for the exposure.

5. Putting in the Plate.

"Surely, it is not necessary to tell us how to put a dark slide into the camera" I fancy I hear some reader saying. "You simply put it in." Quite so; you simply put it in, yet plenty of pictures have been spoilt in the process. The camera has been shifted slightly, so that something we wanted just in our picture has been just out of it. Or the photographer has "simply put in" the same side of the same dark slide for two different exposures. Careless blunders, due to want of method, no doubt, but just as fatal in their results as leaving the plate out altogether might be. It is well not to draw the slide until just before making the exposure, as there is always a possibility of light leakage at the shutter or at the stop, which is harmless for a moment or so, but may be injurious if allowed to act for some time. If the shutters draw right out, care must be used in drawing them out, and putting them in again, that the shutter is held quite square with the dark slide. If one corner is in

the slide while the other is out the "light trap" at the top of the slide will be held open, and the plate will be fogged. I have seen a 15 x 12 plate spoiled by taking the dark slide out of the camera without the preliminary formality of closing the shutter, and was present on another occasion when a nervous photographer drew the wrong shutter of a double dark slide in his excitement. The slide should be dusted before being put into the camera, or any dust on its shutter will be wiped off on drawing it and disseminated over the inside of the camera.

6. Exposing.

It is a good plan to decide the exposure before putting the dark slide into the camera. If exposing with the cap it should be done very carefully, so as not to leave the camera in a state of tremor during exposure. It should be loose enough, and the camera firm enough, to enable a time exposure to be built up of any number of separate exposures as may seem desirable. In this way the lens may be capped while people walk in front of it, or during a gust of wind.

When making an exposure the photographer should face his subject, not look at the camera, so that he may be prepared to put the cap on the moment anything seems to call for it. The commonest oversight in exposing is to make the exposure before drawing the shutter of the dark slide, so a habit should be made of glancing at it to make sure this is not being done. It is easy enough, sometimes, to draw the shutter and make a second, and this time effective, exposure, but it may easily happen that this is not possible, or that the conditions were much more favourable at first.

7. Packing up again.

This is the last of our seven stages. The dark slide should be closed as soon as the exposure is finished; and when it has been put back in the camera case a note of the exposure may be made while it is fresh in the memory. In taking the slide out of the camera, it is well to look at the number on it, and to make sure that the plate actually exposed was the one we intended to expose. It is a little thing, but a mistake here is quite easy. The next step should be to put the lens away, and then to replace the various adjustments to the normal position. If this is not done some part of the camera may be strained and injured, or even broken,

in the attempt to close it up. Then when all is packed away before going on there should be a final glance round the ground where we have been at work to make quite sure that nothing will be left behind.

Such are the stages in landscape photography. Every photographer carries them out very much on the lines laid down, although there may be little differences in method which are revealed by this setting of them out in detail. If this article serves to remind its readers of the importance of method at every stage of the proceedings, if we would

count on a successful result at the finish, I trust that they will think the time spent in reading it has not been altogether wasted.



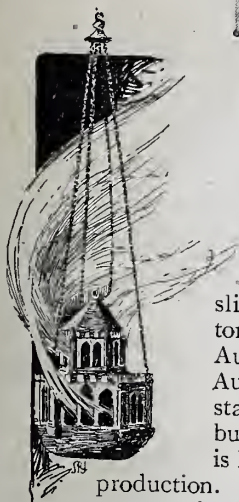
A W-LSH BEAUTY.

By B. WALLACE.

Awarded a Certificate in the Beginners' Competition for May.

PRACTICAL AUTOCHROMY.

By **ALFRED WATKINS.** Special to "Photography and Focus."



UNLESS transparencies of large size are contemplated, I am strongly of opinion that stereoscopic slides form by far the most satisfactory way of producing and showing Autochromes. In the stereoscope an Autochrome is completely satisfactory, standing out, not only in the colours, but in the solidity of nature; and it is looked upon as a complete and final production. On the other hand, if we put a quarter-plate Autochrome into the hands of an ordinary person and ask him to hold it up to the sky, his remarks, in nine cases out of ten, will show that he looks upon the plate as an unfinished production, from which, he says "I suppose you will be able to get coloured prints."

The plates are not yet supplied in the ordinary stereo size. In my case I use two lantern-size plates, side by side in a special carrier, in my $7\frac{1}{2} \times 5$ camera. With a quarter inch strip cut off one side of each plate after completion, they can be mounted on a piece of glass as a stereoscopic transparency. But these remarks are only preparatory to the main object of this paper, in which I hope to give information tending towards greater simplicity and certainty in making Autochromes.

The three points in which I depart from Messrs. Lumière's instructions are: (1) Exposure, (2) first development, and (3) intensification.

For exposure I naturally advocate my actinometer exposure meter. In the early use of this for Autochromes a great difficulty cropped up. It was found that indoor exposures and poor light required relatively longer exposures than the actinometer indicated. So that if 2 was the right speed number of the plate (used through its screen), it was necessary to use a speed of 1 for interior work to avoid under-exposure. Many critics at once jumped to the conclusion, "Oh! of course the actinometer paper is not orthochromatic, and is not so sensitive to feeble and yellow light as is the plate." But, as I pointed out, the actinometer paper already darkened too fast in these feeble lights to indicate the right exposure, and to make it more yellow-sensitive would increase, not decrease, the difficulty. I finally traced the matter to a failure of the usual law of intensity of light and time of exposure being inversely proportionate; and I think that I have succeeded in providing a thoroughly efficient exposure guide, by fitting to the Bee meter a new calculating face, which makes the longer time allowance requisite for feeble lights, whether the feebleness is caused by a small stop or by a weak light.

Before proceeding further, I should point out that, while in ordinary negatives a considerable variation in exposure can be made with equally good printing results, the same is not the case with Autochromes. The critical point is both to expose and to develop

to the right extent. Under-exposure gives (in the final positive) too great a density all over; while over-exposure obliterates some of the high lights, and leaves insufficient unaltered silver bromide with which to form the positive image in the second development. The film is a thin one, and every particle of silver in it goes either to form the first image (which is dissolved away) or to form the final image. There is no surplus, as in ordinary negative making, to be dissolved away by hypo. The first image and the second image bear the same relation to each other as a die does to the coin which is struck from it.

It is, therefore, necessary for best results both to expose and to develop to the proper depth.

In development Messrs. Lumière undoubtedly made a slip in their first instruction. They most emphatically laid down two and a half minutes as the *invariable* time for which to develop. As a matter of fact, it is necessary, in order to get uniform results, to vary the time according to the temperature; and in winter I found that up to five minutes was required with the Lumière pyro-ammonia. There have been advances made lately in giving the variations of time for different temperatures; and I have been able to put the variations in the form of a simple slide rule. I (and others) have found that various developers are equally efficient for the first development. Only one developer (the Watkins time developer) is issued with a scale of time variations for different temperatures, and I therefore advocate using this. It should be employed at double strength, as it is best not to soak the film too long; and a little bromide should be used with it.

Another point not sufficiently explained in the original instructions is the poor keeping properties of some of the solutions. The D solution (the second developer) will not keep for more than a day or two; and I prefer to make it up fresh each time. The C and E solutions (reversing and developer destroying) also keep badly, and are best renewed after a week.

My experience has been that for stereoscopic slides, at any rate—and I think for other work—intensification is best omitted altogether. This also cuts out the clearing solution H and two of the washings. I have found quite sufficient colour contrast given without intensification, which then only tends to a false exaggeration of colour. It will, I think, be convenient for me to give (with formulæ) the full details of the procedure I advise. I use—unless there are reasons against them—the Lumière formulæ.

Exposure.

A Bee meter with the special Autochrome dial (which can be got for a trifle to fit existing meters) is used to determine the exposure. The sunlight is tested, or, if detail in shadow is required, the average between the sunlight and the shade light is measured, and the exposure calculated in the usual way, using speed 2 for the first trial. But the speed of different batches seems to vary; and some users have found a higher speed required up to 6. The calculation presumes that the Lumière screen is used, behind the lens. One must

be sure that the glass side of the Autochrome plate is next the lens. If the screen is used behind the lens no allowance need be made for the thickness of the Autochrome plate.

First Development.

The Watkins time developer is what I use for this, at double the usual strength (two drams of the concentrated developer to one ounce), adding five minims of a ten per cent. bromide solution to each ounce. Development is carried on for three and a half minutes at 60°; but as the temperature of the room and of the developer will probably be different from 60°, the 60 indicator on the bottle is set to 3½, and then against the true temperature of the room (tested by a common thermometer) there will be found the correct time of development. There is no need to look at the plate at all. The plate is best put in the dish in darkness, the developer poured on, and the dish covered up. A red light is not required, as the gas can be turned up as soon as the dish is covered, to read a watch or clock.

It is of importance that a large jug of water be drawn from the tap at least half a day beforehand, and that this is used to dilute the developer. If water is used direct from the tap it may be of different temperature from that of the room.

The First Washing.

This should be done under a gentle drip from a tap for twenty seconds. The plate should not be handled, but kept in the dish through all the operations without taking it out at all. The dish should be kept moving while it is under the tap, or the film may blister.

The Reversing Solution.

Potassium permanganate	...	17	grains
Sulphuric acid	...	1½	drams
Water	...	20	ounces

This should be poured on the plate, which, up to this point, must not be exposed to light. But as soon as it is covered by this solution, full daylight or gaslight can be admitted for the remainder of the time. This solution must be allowed to act for three or four minutes, rocking the dish several times.

The Second Washing and Second Development.

The second washing should be, as before, for from thirty to forty seconds. The following is the second developer:

Sodium sulphite (crystals)	...	26	grains
Dianol, or amidol, or diamidophenol	...	9	grains
Water	...	4	ounces

My own procedure is to put these quantities of the dry salts (after once weighing them out the quantities may be guessed with sufficient accuracy) in a measure and to fill this up to four ounces with water, making fresh developer each time, as it does not keep. The exact strength of developer is unimportant. Before the second development, however, the plate (still in the dish) must be exposed to daylight for at least enough time for the meter to darken to a full tint. If daylight is not practicable, a foot of magnesium ribbon should be burned within six inches of the plate. The second development should last for four minutes; as *all* the bromide particles have to be developed, it is not possible to overdo it. But in all the processes over-soaking in a solution should be avoided or the colours may suffer.



Old Charlie.

By Wm. Keighley.

The Third Washing and Clearing.

The third washing is for thirty to forty seconds as before. The clearing solution employed is a weak reversing solution, made by taking half a dram of the strong reversing solution and making it up to three ounces with water. It is poured on for ten seconds only, unless a decided reduction is wanted, when the time may be doubled or trebled.

The Fourth Washing and Fixing.

The fourth washing is for twenty seconds, and the plate is then fixed by being immersed for two minutes in the same dish that is used for all the other operations, in the following bath:

Hypo	...	3	ounces
Potassium metabisulphite	...	1	dram
Water	...	20	ounces

The Final Washing.

This is for five minutes under a gentle stream directed from a tap on the spout of the dish, as if it falls on the film it might cause frilling or blisters. In all the washing operations care must be taken that the tap water is not of greatly different temperature from that of the room, for, if it is, there will be a risk of frilling. The plates of recent make do not seem liable to frill as those of earlier issues were; and keeping the plate in the dish throughout, without handling it with the fingers, will minimise this danger.

I expect that most readers will shirk the varnishing process. It probably adds a little to the transparency of the Autochrome.

MM. Lumiere's Latest Instructions.

I am not struck with Messrs. Lumière's latest method for timing the first development. It attempts to allow for variations in exposure by adding ammonia inversely in proportion to the time of appearance. This may be sound practice; but then if an alteration of the time of appearance is caused—as it probably is—by temperature, it is not sound, as the time is also varied. Moreover, it requires a "dark room light." I consider it much simpler to keep the exposure uniform by gauging it by a meter, as I have described, and then the only allowance required for the time of development is that caused by temperature, and this is best done by time only, without altering the composition of the developer. It will be noticed that in the procedure I have outlined only four bottles of solution need be prepared instead of the eight specified in the original instructions. In fact, only three bottles are required when the second developer is made up at the time of using.

HOLIDAY INFORMATION.

SWANAGE.

Will you please give me some idea of the photographic possibilities of Swanage and its neighbourhood?—H.S.B.

Swanage, once an old-world fishing and stone-quarrying village, is now a rising seaside health resort, nestling among the Purbeck Hills, about three and a half hours' journey from London by the L. and S.W.R. It affords plenty of scope for both the serious worker and the snap shotter. In Swanage itself there are still left several specimens of old stone cottages with stone roofs to them, and there is a fine old church with a tower that has a long history. Then there are cliffs and rocks around the coast, once occupied by smugglers, or the sites of the ancient quarries.

East of Swanage, about three and a half miles away, lies Studland, an old fishing village, very rich in landscape. To the west the country is broken and rugged, and the coast rocky. Chapman's Pool and St. Alban's Head, about seven miles away, should be seen.

The famous ruins of Corfe Castle, built in Norman times on the site of a royal hunting lodge, where King Edward was slain in 979, at the instigation of his mother Elfrida, lie six miles from Swanage, and can be reached by rail. A few miles further on by rail brings us to Wareham, an ancient town described by an artist as a place of picturesque decay. Another town which will provide a lot of work for the picture maker is the old seaport of Poole, nineteen miles by rail from Swanage. It is mostly used by wind-jammers, and has a picturesque harbour. For pure landscape there is Creech, with the finest Scotch firs in Great Britain. It lies in the heart of the Purbeck Hills, about eleven miles from Swanage, and permission should be secured beforehand from Mr. Bond, Holme Priory, near Wareham.

Swanage is well provided with apartments, hotels, and boarding houses. A dark room is provided and photographic materials supplied by T. Powell, photographer, of Station Road, and by T. J. Wilkes, chemist, of 3, Institute Road.

SHANKLIN.

Any information which you have concerning Shanklin and district will oblige.—SEMAJ.

Shanklin is situated in the Isle of Wight, on the southern end of Sandown Bay, and surrounded by a range of verdant hills. It is, without doubt, the prettiest part of the Isle of Wight, and has much to interest the photographer.

One of the favourite walks is from Shanklin to Ventnor, passing Shanklin Chine. This is a cleft or ravine in the cliffs, deep, and beautifully wooded (admission 3d.) A little further on is Lacombe Chine, and beyond this again is the delightful village of Bonchurch. The church and churchyard should on no account be missed, and the district should be one which might

well be dealt with by the Autochrome plates, for the colouring is very rich and varied. Ventnor itself is a flourishing watering place, noted for its warmth in winter and mildness in summer.

Blackgang Chine will be found worth seeing, and can be reached by coach, as can Carisbrooke Castle. This ivy covered fortress of the olden time, is picturesquely situated on the top of a steep hill, and in itself and neighbourhood may be the theme of many plates. The well with its donkey pump, the rooms where King Charles I. was imprisoned by the Parliamentarians, the old walls, gatehouse, and church should not be missed. There is a Roman villa (6d. admission) to be seen at Carisbrooke.

Brading is easily reached from Shanklin by rail. The bull ring, stocks, and whipping post are preserved here; there is a Roman Villa also, and an interesting church. All round the island offers opportunities for cliff and sea pictures, for quiet landscapes, woodland scenes, and cattle studies, while the hand camera worker will find much to occupy him on the beach and amongst the boats. The Solent is not very far away, and coach, rail, and steamer trips combine to make every part of the island accessible.

Mr. J. Milman Brown, at 3, Shaftesbury Buildings, provides a dark room.

LLANDUDNO.

Particulars of Llandudno will oblige.—H. E. FROST.

Llandudno is one of the finest of the Welsh watering places, and is accessible by rail *via* Chester, and by steamer from Liverpool. It stands between the two rocky promontories known as the Great and Little Orme's Head respectively, on a bay which is two miles along its curving shore. It has the advantage of two shores, one in the bay facing east, and the other on the estuary of the Conway facing west. The fine air, and the views of sea and mountain, including some of the greatest heights of Snowdonia, though not Snowdon itself, and the delight of wandering about the Great Orme, have helped to make Llandudno deservedly popular.

The town itself does not offer many opportunities for camera work, but its immediate neighbourhood can provide ample work. There is, for example, the walk or drive round the Great Orme's Head (fare 1s.), which provides a great number of splendid sea views. The distance is about five and a half miles. St. Tudno's Church (1 mile) marks the cell of the hermit St. Tudno, and gives its name to the town. It is bare and primitive in appearance, but the font and two very curious thirteenth century coffin lids should be noted. The cliffs at the Little Orme's Head (2 miles) are very picturesque, and there is a magnificent view from the summit. Llandrillo (4 miles), Eglwys-Rhos (1½ miles), where "Grandmother's chair" may be taken, Brynlan Tower (1½ miles), Gloddaeth (2 miles), and Deganwy Castle (2½ miles), are all well worth visiting.

Four miles up the Conway River is Conway, with its most picturesque and

beautifully situated castle. The town is walled, and contains some quaint old houses, notably the Plas Mawr. There is work for a week in and around this town, and many an exhibition picture has it provided. The steamer which runs up the Conway river will take us from Deganwy to Conway and on to Trefriw, where there is fine opportunity for landscape work, rushing streams, wooded valleys, and imposing mountains. Above Trefriw is Bettws-y-coed, which should certainly be made the objective of one day's excursion.

Talycafn (8½ miles), and Penmaen-mawr by path and Deganwy ferry (8½ miles) should also be seen. Coaches run in summer to Trefriw, Bettws-y-coed, the Swallow Falls, Capel Curig, Llyn Ogwen, the Nant Francon Pass, Aber, Colwyn Bay, and Bodnant Hall, and provide a convenient means of seeing the district. Some of the country through which these coaches pass is the finest in Wales.

Dark rooms are provided at the following establishments, where also a supply of apparatus and material is kept: L. A. Cocker, 68, Mostyn Street; A. Deacon and Son, Gloddaeth Street; F. N. Mercer, 4, Queen's Buildings; W. A. Roberts, 31, Mostyn Street; and Winter and Co., 3, Mostyn Street.



The Size of a Lantern Screen.

If we know the focal length of the lens in the lantern, it is easy to calculate the largest size of disc which can be got in any given room. To do this the greatest distance which the screen can be got from the lens of the lantern in inches should be multiplied by three and divided by the focal length of the lens in inches. The result gives the diameter of the disc in inches.

Example.—The lantern, which is provided with an 8in. lens, cannot be put at a greater distance from the screen than 15ft. It is required to know the diameter of the disc under these conditions. 15ft. = 180in. $180 \times 3 = 540$. $540 \div 8 = 67\frac{1}{2}$. 67in. = 5ft. 7in. The greatest diameter of disc possible will, therefore, be 5ft. 7in.

Intensifying with Copper.

The copper intensifier advocated in the past by Dr. Liesegang gives a great increase of density. The negative is first thoroughly washed free from hypo, and is then placed in the following solution until it is bleached:

Copper sulphate	... 1 drachm
Potassium bromide	... 1 drachm
Water	... 5 ounces

It is then again well washed, and blackened in the following:

Silver nitrate	... 100 grains
Water	... 5 ounces

Finally it is well washed once more and dried. The success of the method is said to depend on the washing being thorough.

CHATS WITH A BEGINNER

ON THE MOVEMENTS OF A CAMERA.

V. The Swing Back.

By E. LLOYD.

ANYONE looking through a number of photographs by a beginner, is nearly sure to find some of architectural subjects in which the buildings appear to be toppling inwards. Instead of the different vertical lines being parallel, they will be found to be farther apart at the bottom of the picture than the top. The defect is a very common one; it can often be seen even in the photographs that are reproduced in the better class of illustrated papers and magazines. Ask a photographer the cause of it, and it is ten to one that he will tell you that it has been brought about by tipping the camera upwards.

This is only a half truth. The camera can be tipped upwards without this defect arising, provided the ground glass and the plate are kept strictly vertical. When we are dealing with some lofty object in front of the camera, and we see that our apparatus is level, it usually happens that on looking on the focussing screen we find a great deal more of the ground showing than we want in the picture, while the top of the object is right off the plate. There are two ways of remedying such a state of things when a better view point cannot be obtained. One is to use the rising front, so as to raise the lens above the centre of the plate, and the other is to tip the camera upwards.

In order that this tipping can be done and yet the plate may remain vertical, cameras are fitted with the movement known as the swing back. This allows the back part of the camera, which carries the focussing screen and the dark slide, to be swung so that it is no longer at right angles to the baseboard, and allows us to clamp it in the position selected. Such a movement is known as the "vertical swing." Many cameras are fitted also with a "horizontal swing." This is an arrangement by which one side of the back may be brought nearer to the front than the other. If the camera is one that has to be turned bodily on its side to get a horizontal instead of a vertical picture, or *vice versa*, the horizontal swing when the camera was turned would become a vertical swing, and would be useful accordingly. Few, if any, of such cameras have both vertical and horizontal swing, however, and the usefulness of the horizontal swing is limited to the focussing, as will be referred to later on.

The vertical swing back generally takes one of two forms. In the best type of landscape and studio cameras, the swinging part of the back A (figs. 1 and 2) is carried on two short brass arms C. When the swing is not required the swinging part fits close up to a part of the back which is permanently at right angles to the baseboard, as shown in fig. 1, the little bolt D and the slotted stay and screw E holding the two firmly together. The bellows pass through B, which is a mere frame, and are attached to the part A which swings. When the swing back is required the screw E is loosened, the catch D raised, and the part A is pulled away from B as far as it will go, as in fig. 2, and the catch D is again pushed down. The back is then free to swing on the pivot F, and can be clamped at any angle by the screw E. In some cameras a slotted stay and screw are used at D instead of the catch. This is the most convenient swing

back to use, as the ground glass swinging from the centre is on the average no nearer to or further from the lens after swinging than before, and we can therefore focus first and then introduce what swing may be necessary and stop down to get the picture sharp.

Though the form just shown is the most convenient to use, it is not the simplest to construct, at least with most forms of modern folding cameras which lend themselves very

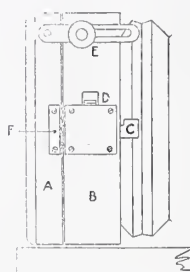


Fig. 1

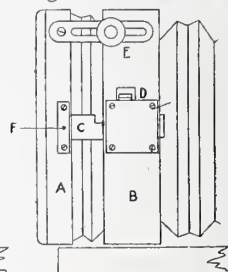


Fig. 2

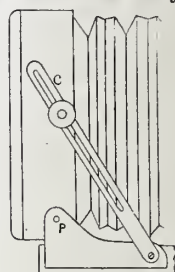


Fig. 3

readily to the introduction of the simplified form of swing back, shown in fig. 3. Here there is no part of the back which is always at right angles to the baseboard, but the whole back swings on the pivots P, being secured at any angle that is required by means of the clamp C. Although theoretically perhaps this form of swing is not so good as the other, in actual practice there is little to choose between them. In fact, in one way at least this is the better, as it is usually possible to get a much greater swing with this pattern than with the other. Much swing is not often required, and the swing back is being used less and less as time goes on; much that used to be done with it being now done by the rising front. So that between the two patterns there is very little to choose, and the choice should be governed by the consideration of the type of instrument that is wanted. If portability is not very important, the form shown in figs. 1 and 2 is likely to be selected; if the camera is to fold up compactly and be light in weight, the other design will probably be found preferable.

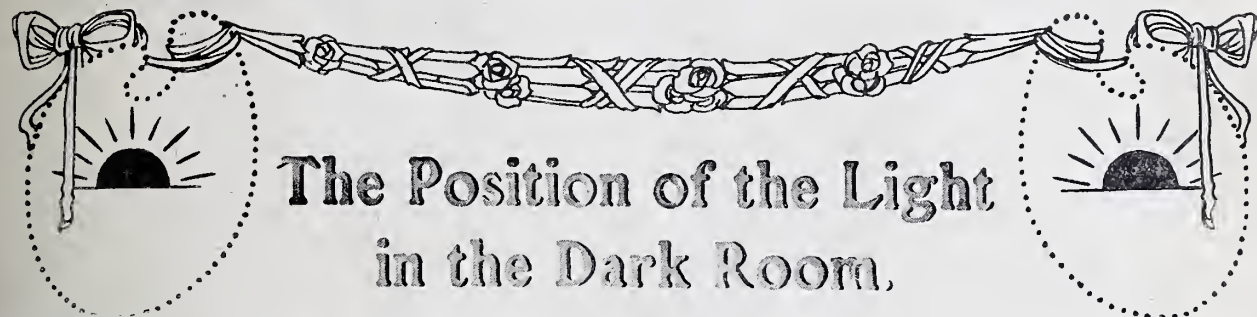
It is not much use having a swing back to enable us to get the back vertical if we have no means of ascertaining when it is vertical, and a level or plumb line becomes virtually a necessity with it. Most of the levels and plumb indicators fitted to cameras are too small to be of any use when the swing back is used. They do well enough to indicate roughly when the camera is level, but if any dependence is placed upon them in architectural work, where long vertical lines come close to the edge of the plate, they may be found quite unreliable. There is no better indicator in such circumstances than a plumb line, which may be extemporised by tying some weight, such as a bunch of keys, to the end of a foot or two of thread, and holding it against the back of the camera. With a little care the back can then be got strictly vertical.

Whenever the swing back is used (without the swing front) the lens will require stopping down to an extent dependent on the extent to which the back is swung. This may mean the use of a very small stop indeed; but if there is no

reason against the exposure being a long one, this is no great drawback. With high class modern lenses which will cover a much larger plate than that for which they are being used the same result can be got with a great extent of rise, keeping the camera level, as can be obtained by tipping it and using the swing back, and in such a case there is no need to use so small a stop. For this reason the rising front is displacing the swing back.

There is another use for the vertical swing, and, as already pointed out, it is the only use for a horizontal swing. This is for focussing. The nearer an object to the lens the further must the ground glass be from the lens for the object

to be sharp. If, then, we are photographing a subject in which all the distance comes at one end of the plate and all the near objects at the other, instead of stopping down to get both sharp at the same time, we may swing the back so as to carry that part of the focussing screen on which the near objects fall further away from the lens than the rest. The horizontal swing may be used in the same way. This introduces a certain degree of distortion, and the vertical swing must never be used for this purpose with architectural work, but with landscape and other subjects where the distortion is very often quite unnoticeable or unimportant, it will be found very useful at times.



MUCH has been written about different forms of dark room lanterns and about the method of making safe lights for use in them, but comparatively little attention has been given to the position of the light in the dark room itself. Inasmuch as this is at least as important as the other side of the topic, the omission is curious.

If we want to decide which is the best position for the light we must first consider what it is we want to see. In the ordinary course of amateur photography the work that is done in the dark room light is limited to filling and emptying slides, developing plates, and bromide printing and enlarging. The most important work of all beyond a doubt is the development of negatives. To see to do this we ought to have the bench well lit that we may be able to put our hands quickly on any bottle or measure that may be required, and also that we may not accidentally knock over anything that may be standing about. We shall certainly want to see the surface of the plate once or twice as it lies in the dish to see first that it is properly covered with developer, and later to see how the image is making its appearance. But we shall not want the light falling on the plate all the time, and, in fact, the general illumination of the bench and the room is more important than the lighting of the dish and its contents.

Many dark rooms seem to be arranged on the opposite principle entirely. The light is a small one, and is concentrated on the spot that is to be occupied by the dish; all else is in perfect gloom. A hanging lamp with the red glass forming its bottom is a favourite arrangement with those whose dark room is fitted with the electric light. This has one good (one very good) feature—the direct light from the lamp never strikes right into the photographer's eyes. He is therefore able to use his eyesight as well as the local illumination will let him. But it does fall straight down upon the plate—the one thing that should be shielded as much as possible from direct light. Moreover, there are two operations one often wants to perform which cannot be done conveniently with

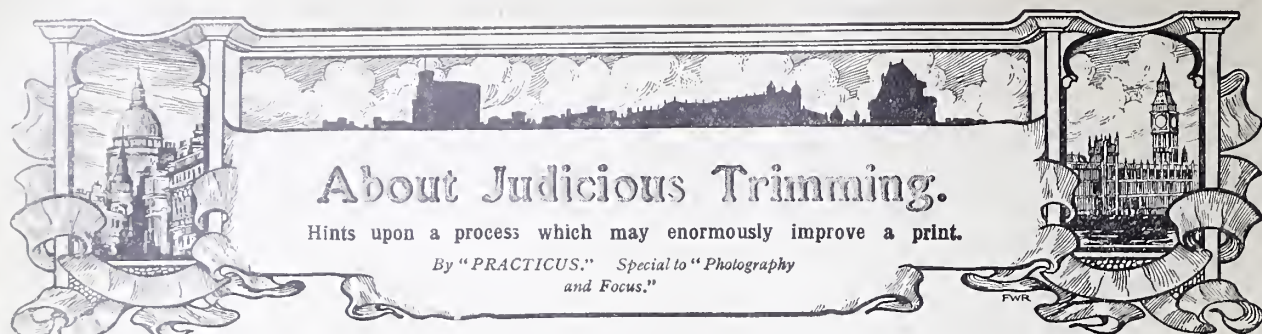
this form of light. One is to hold up a negative and look through it to see how the density is building up, and the other is to pour a certain quantity of liquid into a measure. Nor is the bench generally well lit by this direct vertical light, and it is easy to bring down a porcelain dish on a fragile graduated measure or bottle. The straight downwards system, therefore, is not to be commended.

Another position is to have the light behind the sink or bench, so that as the photographer stands to his work he faces it. This is very often the arrangement in dark rooms lit by a window, and not by a lamp. It lights the bench very well and the sink also, but it has the drawback that the amateur faces the brightest light in the room all the time. The result of this is that his eyes are never in the best condition for seeing anything in the darker part of the room, which, in fact, is practically invisible when the lighting is arranged in this way.

A third position, and the best beyond a doubt, is to have the light at one end of the bench or sink. In this position everything that is on the bench is well lit, the photographer faces a blank wall, and not a bright light, and the light falls obliquely on the plate as it lies in the dish, showing at once if it is properly covered with solution. Where the sink has a bench at one side of it only, the best place for the light is at the bench side of the sink, so that the sink itself is comparatively in darkness, and as soon as the plate is seen to be covered the dish can be put down in the sink. For plate changing or filling slides a card may be leaned up at an angle in front of the lamp or window, so that the whole of the bench itself is in darkness. There will be enough stray red light in the room for one to see what is to be done, while there is absolutely no danger of light fogging the plates, and the operation can be done with the greatest care and deliberation.

So that there seems to be no doubt that the balance of advantage lies with the light at one end of the work bench, both the other positions having drawbacks, as the practical worker will soon find out.

C. MENZIES.



About Judicious Trimming.

Hints upon a process which may enormously improve a print.

By "PRACTICUS." Special to "Photography and Focus."

IF it is foolish to show untrimmed prints to one's photographic friends, how much more foolish must it be to send untrimmed prints in to a competition; yet the editor of *Photography and Focus*, I note, a few weeks ago pointed out that this was being done. It must surely be that the senders failed to grasp how very much judicious trimming could improve a picture.

Some workers seem to dislike trimming on the ground that it is wasteful. They positively shrink from the cutting down of a half-plate print to something smaller than quarter-plate size, and find it hard to believe that a part may be better than the whole. Of course, if a number of identical prints are to be made, it would be very wasteful to use half-plate pieces, and then to cut most of the paper away. In such a case, the paper should be only a little larger than the finished print, and should be put, as accurately as is possible, on the part of the negative which is required. But when only a single print is wanted, or when the first print of a number is being made, this is poor economy. It is best to print the whole of the negative, and even to finish the print right off, before starting to trim it.

The trimming should be a matter of as much thought as the original arrangement of the picture itself. It is at this stage that we can decide how much of what we have taken we can do without. This, I am aware, may seem to be taking hold of the wrong end of the stick; and the reader will think that the question should rather be how much can be left in. But this is a mistake. Everything that is not needed to help the composition weakens it; and for proof of this it is only necessary to make a careful trial.

In order to decide how much may best be cut off, two L-shaped pieces of cardboard, as shown in the illustration, are required. Either leg of the L should be longer than the longest dimension of the untrimmed prints; and it is as well, if possible, to have a couple of these L's made out of each of the different colours and surfaces of the mounting boards that may happen to be in use. One can then try the effect both of trimming and mounting; and the two are certainly most conveniently dealt with together.

The different L's are placed on the print and slid about until the best effect is obtained. As the print may have a tendency to curl, it should first be laid face

downwards on a clean sheet of paper, and drawn up round the edge of a ruler, or of a paper knife, to flatten it.

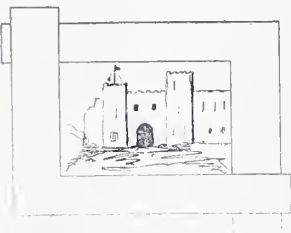
When the best arrangements had been decided on, a clean piece of glass should be laid upon the print and the L's, so as to press them together. The print can then be viewed from a little distance, to make sure that no further improvement is possible; and only when this seems quite certain should the actual trimming be put in hand, a light pencil line being made on the print to indicate the boundaries determined on.

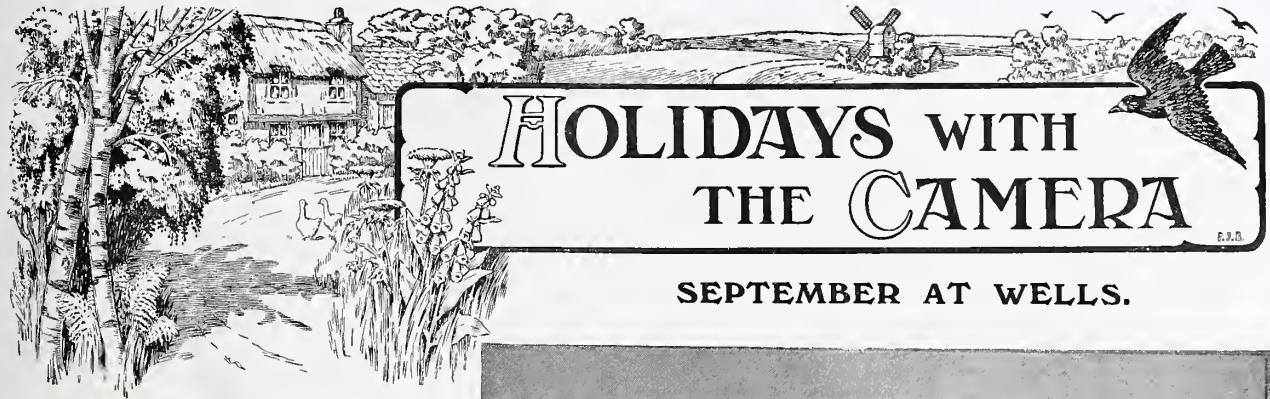
Most photographers use a piece of glass as a guide for the trimming knife, but a steel straight-edge, such as can be bought very cheaply at a tool shop, is to be preferred. The old plan of trimming on glass or on zinc punishes the knife terribly. It is much better to use a piece of stout card, throwing it away when its surface gets too much hacked about. I always use an ordinary pocket knife for trimming, keeping the small blade for that purpose only, and never using it without bringing it to as fine an edge as possible on a scrap of oilstone.

The pencil marks should first be tried over with a square, to make sure that the angles are all strictly true, and then the straight-edge being put down on the picture and not on the part that is to be trimmed off, and held firmly down with the left hand, a single cut is made with the knife in the right hand, held with its cutting edge almost lying on the surface of the print, and sloped so as to under-cut the print a little. By keeping the edge down near the print, the cut is much cleaner than if the knife is held nearly vertical. By undercutting a little the white line of the edge, which is often so objectionable when the print is on a dark mount, is prevented from showing.

Ragged edges are of all the faults which a print can possess the most inexcusable. The beginner who gets his prints too light or too dark may be forgiven for not knowing what particular photographic fault is the cause of his trouble; but a badly trimmed print explains itself. A sharp knife, a smooth straight-edge firmly pressed down, and a piece of card underneath make the operation quite simple, if the print is thoroughly dry. A damp print is almost certain to tear.

One other caution may be added. The beginner should be very careful to avoid "fancy" shapes. Always let his prints have straight edges, sharp corners, and the angles right angles. They may be as long and narrow or as broad and square as the subject seems to require; but fancy shapes, circles, domes, rounded corners, etc., are almost always a mistake, transferring the attention from the picture to the eccentric way in which it has been trimmed.





HOLIDAYS WITH THE CAMERA

SEPTEMBER AT WELLS.

By F. H. Cliffe.

An article which was awarded a special certificate of honourable mention in the Great Holiday Competition, 1907, organised by "Photography."

SEPTEMBER is an excellent month for Wells, mainly because the altitude of the sun is just right for effective lighting both inside and outside of the cathedral. The distant exterior views are then, perhaps, seen at their very best, and an adequate rendering of the charming effects of the afternoon sunlight playing on the western faces of towers and transepts will be found a most worthy and taxing exercise. A long focus lens (*e.g.*, length of plate \times 2) will be necessary, if enlargement be not intended.

The nearer view points are, in their way, equally good, as also are the delightful "accessories"—the graceful chain bridge, the comparatively unrestored vicars' close, the delicate oriels, and other architectural riches.

Inside the church, having once recovered from the ferocious effect of "those two great staring eye-balls" which form part of Wells's greatest disfigurement—the inverted strainer arches—we find abundance of material. In a general way one may say that lenses of rather wide angle will be found most useful; eight and a half inches on a whole-plate is a useful proportion, though we shall occasionally require seven inches, and, in the more open parts, eleven inches.

In the nave and transepts the light is good, and the stone creamy in colour, so it is easy to over-expose. More deceptive still is the light in the Chapter House. An unquestioning appeal to an exposure meter is strongly advised.

In and near the Undercroft (a quasi-crypt) we find the other extreme. Here it would seem almost impossible to over-expose. Under favourable conditions a gleam of sunshine may break through one of the dingy windows and compel an exposure. One day, when I had already "lien among the pots," *i.e.*, sauntered among stone coffins, etc., for a whole hour, awaiting the consummation of a portentously long exposure on the doorway of this gloomy apartment, a bright beam of light shot down to the floor near the old cope-chest, strongly and successfully tempting me to give up my doorway and risk an



Wells Cathedral: Sunlight and Mystery.

By F. H. Cliffe.

attempt at the unexpected "effect." I was using a lens of very much shorter focal length than the new composition required, and so I had afterwards to make an enlarged negative. I have occasionally taken a second camera to be in readiness for such emergencies, but nothing ever happens then, and an extra camera is a nuisance.

The vista of the graceful pointed arches of the Lady Chapel as seen from the choir should not be missed, and perhaps I need hardly refer to the long-suffering staircase to the Chapter House.

Amateurs may be glad to know that supplies of material and the convenience of a dark room may be obtained at the Cathedral Studio — Messrs. Davies and Partridge.

Leaf Prints.

THOSE who are on the look out for some variation from the ordinary run of work with the camera would be well advised to try the making of leaf pictures. Although strictly photographic, it is a form of photography in which the camera is not employed at all, both negative and positive being produced by contact, and both on P.O.P. or similar paper.

The first proceeding is to get the leaves, and here the opportunity for taste in selection and arrangement comes in. There is, of course, a wide field for choice, and it would be quite a mistake to limit one's self to leaves of the commonplace type, such as those of the fern and ivy. Many others can be made into most attractive and decorative combinations. They must be dried before being used, and for this purpose nothing is better than ordinary blotting paper. The leaves are arranged on this in the way preferred, two or three more pieces of blotting paper are put on the top, and the whole is well pressed down and left under pressure for a few days. The damp blotting paper should be changed several times, for dry, but if it is dried the same paper can be used over and over again. A letter copying-press is very convenient for this purpose, but the pressure applied should only be quite a moderate one; and the writer herself only uses two sheets of thick plate glass, between which is put the pad of blotting paper.

When the leaves are sufficiently dry for the purpose the negative is made from them. This can be done on an ordinary plate, if a glass negative is preferred, but P.O.P. answers perfectly. A sheet of glass is placed in a printing frame, the leaves are put upon it, a piece of P.O.P. is inserted, and the frame closed and exposed to the sky. Printing should be carried on far more than seems to be correct, and even under the most opaque parts of the leaves the P.O.P. should be decidedly darkened.



Wells Cathedral: Declining Day.

By F. H. Cliffe.

The print made in this way may be simply fixed and washed, but I prefer to tone it first, just as an ordinary print is toned. Even when it is finished it must look too dark for a print. It will, of course, be a negative of the leaves, which will stand out against a very dark background.

This negative is then placed in a printing frame on a piece of glass, and a print may be made from it, just as from a glass negative. The leaves will then be reproduced dark on a light background. There is no need to use P.O.P. for this second printing, and both gaslight and bromide paper may be employed.

The whole process is a very simple one, yet the results are most effective. For a variation, skeleton leaves may be used in the same way; but, to my thinking, the ordinary leaves are better.—CAROLINE E. HOOK.

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**An added
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in the hands
of the photographer.

They are
**specially
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at this season
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when the reproduction of the beautiful

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is so important a matter in landscape photography.

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in brilliancy,
wealth of detail,
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delicacy of tones.

Imperial P.O.P.

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Three Months	1	8	Three Months	2	9
Single Copy	1	1	Single Copy	2	1

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 The Advertisement Manager, PHOTOGRAPHY AND
 Focus, 20, Tudor Street, London, E.C. All copy
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All advertisements to be inserted on these
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 warded, less a charge of 1/- for registration. The
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 for on acceptance.

INTERVIEWS.—The Editor will be at 20,
 Tudor Street, on Wednesdays, between the hours
 11.30 and 12.30 a.m., but can only be seen at
 other times by appointment.



THE CO-OPERATIVE WHOLESALE
 Society's Printing Works Social and
 Recreation Club has formed a photo-
 graphic section. The honorary secre-
 tary is Mr. J. J. Hampson, of 17, Lin-
 wood Grove, Longsight, Manchester.

THE BLACK NOTE CAMERA gets an
 excellent advertisement every week,
 we notice, in the French illustrated
 magazine, "Femina," which has, as a
 regular feature, a page of little illus-
 trations which it entitles "Le Bloc
 Notes de Femina."

ALLEGED FALSE PRETENCES. A
 photographer and his wife have been
 arrested in Derry on the charge of
 obtaining money under false pretences
 by selling portraits of the Pope, alleg-
 ing that the profits of the sale would
 go to the church.

A PHOTOGRAPHIC EXHIBITION at
 Colombo is being organised by the
 Amateur Photographic Society of
 Ceylon. The exhibition will be held
 in the Council Chamber, and the
 arrangements are in the hands of the
 honorary secretary, Dr. Andreas Nell.

Books for . . . Photographers.

Science and Practice of Photography.

By CHAPMAN JONES, F.I.C., F.C.A., F.R.P.S.
 Price 5/- net. Post free 5/4.

Instruction in Photography.

By SIR WILLIAM ABNEY, K.C.B.
 Price 7/6 net. Post free 7/13.

Practical Orthochromatic Photography.

By ARTHUR PAYNE, F.C.S.
 Price 1/- net. Post free 1/2.

Successful Negative Making.

(Illustrated.) By T. THORNE BAKER, F.C.S.
 F.R.P.S.
 Price 6d. net. Post free 7d.

All About Enlarging.

(Illustrated.) By C. WINTHROP SOMERVILLE,
 F.R.P.S.
 Price 6d. net. Post free 7d.

Photography Made Easy.

(Illustrated.) By QUI-VIVE.
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"AMATEUR." An illustrated journal
 finishes up its announcement of a com-
 petition with the naive statement,
 "This being an amateur competition it
 is, of course, not possible to award a
 money prize."

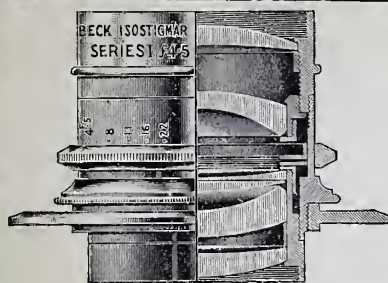
"PATENTS AND DESIGNS" is the title
 of a new weekly journal. Its nature is
 sufficiently indicated by its name, its
 price is twopence, and its publishers,
 "Patents and Designs," 5, Tavistock
 Street, London, W.C.

MOUNTS. Lecturing before the Nelson
 Camera Club, Mr. A. Smith cautioned
 his hearers against the use of mounts
 which attracted attention from the
 prints. A print could be utterly ruined
 by unsuitable trimming and unsuitable
 mounting. Simplicity in the mount
 was the lesson photographers had to
 learn.

THE VICAR'S PHOTOGRAPH. In the
 Parish Magazine of St. Sepulchre's
 Holborn, the Vicar announces that
 those who want his photograph can
 obtain it from the photographers,
 whom he names, for a consideration.
 "It is not vanity which prompts us to
 write this paragraph," he says, "but
 a desire to be spared the request for a
 photograph, which we can neither
 afford to give, nor desire to grant."

REMOVING STOPPERS. Mr. J. Gray
 Duncanson writes, "There is one in-
 fallible way of removing stoppers when
 fixed which I have never seen described
 in print. A few drops of glycerine are
 run round the insertion into the neck
 of the bottle, and the neck is then
 placed in the flame of a candle, spirit
 lamp (preferably) or gas, rotating the
 whole slowly for a few seconds. A
 gentle tap is given and the stopper is
 loose. As a medical man who does his
 own dispensing (after many years ex-
 perience) I have never found this
 method to fail."

ANOTHER SUGGESTION. Mr. P. Clein.
 Campariolo, of Slough, writes us as
 follows: "With reference to your
 annotation about glass stoppers in last
 week's issue, if readers will add to
 their equipment this simple little tool,
 obstinate stoppers will have no terror
 for them. A bit of hard wood, say
 8in. by 2in. by 1in., is taken, and
 about an inch from either end a little
 rectangular pit is dug out, about half
 an inch deep. One should fit, approxi-
 mately, the largest size of stopper
 used, and the other the smallest.
 Their dimensions would probably be
 about 1/2in. by 1in., and 3/4in. by 5/8in.
 I do not claim the idea as my own. I
 have never had a stopper resist this
 tool, nor break. The ordinary amateur
 who does not prepare for difficulties
 will not trouble to make this lever. I
 am not sure that I ought to tender him
 much help, but he will find that if he
 protects the stopper with a thickness
 or two of a towel an ordinary bicycle
 spanner will do as well."



ANOTHER SPECIAL OFFER.

A NEW SERIES OF THE ISOSTIGMAR LENS. f4.5.

Further investigation of the principle of construction of the Isostigmat Lens has shown us its great adaptability. Slight modifications in the formula allow of the construction of every type of photographic lens and we have now succeeded in designing a new series of the Isostigmat Lens working at f4.5. These series possess all the magnificent qualities of these well-known lenses. We have thus made an f4.5 aperture lens which is far ahead in covering power and definition of any we have ever had at such an aperture, and we believe we are correct in claiming it as by far the best large aperture lens yet made. The depth of focus being dependent on aperture cannot be as great in a rapid lens as in a slow lens at full aperture; but when stopped down to small stops the depth is the same as that of the less rapid lenses.

This series is specially suitable for rapid instantaneous work with reflex and other cameras, for landscapes, groups, and press photography. The most rapid exposures up to one 1,000th of a second, and even shorter can be given in a good light; they are also suitable for portraiture owing to their rapidity. The large aperture combined with its perfect corrections, render it specially suited for Autochrome and colour photography. The brilliancy of the central definition is so great that the lenses of this series are very suitable for telephotography, even with large magnifications, the definition is fine. The defining power all over the field is almost as perfect at full aperture as that of the less rapid series, and when stopped down to the same stops is fully equal. The angle covered by these lenses is 60°.

The No. 2, 3" focus is more especially suitable for the taking of moving pictures in cinematograph cameras. For Reflex cameras in most cases, the swing of the mirror prevents the use of short focus lenses. The most suitable sizes are: for $\frac{1}{2}$ -plate camera No. 4, 6" focus; for 5 x 4 camera No. 5, 7 $\frac{1}{2}$ " focus; for Post Card camera No. 6, 8 $\frac{1}{4}$ " focus; and for $\frac{1}{2}$ -plate camera No. 7, 9 $\frac{1}{2}$ " focus.

The two single combinations can be used as long focus lenses with small stops; the foci are approximately half as long again, slightly under double the focus of the complete lens.

No.	Focus.	Size of plate covered.	Size of flange screw.	Price in Iris mount.			Price in brass focussing mount.			Price in sunk mount.		
				£	s.	d.	£	s.	d.	£	s.	d.
2	3"	2 $\frac{1}{2}$ " x 2"	1.32"	3	12	6	4	10	0	4	0	0
3	4 $\frac{3}{4}$ "	4 $\frac{1}{4}$ " x 3 $\frac{3}{4}$ "	1.75"	4	15	0	6	0	0	5	2	6
4	6"	5" x 4"	1.75"	5	10	0	6	15	0	6	0	0
5	7 $\frac{1}{2}$ "	6 $\frac{1}{2}$ " x 4 $\frac{3}{4}$ "	2"	7	7	0	8	12	0	7	17	0
6	8 $\frac{1}{4}$ "	7" x 5"	2"	8	15	0	10	0	0	9	15	0
7	9 $\frac{1}{2}$ "	8 $\frac{1}{2}$ " x 6 $\frac{1}{2}$ "	2 $\frac{1}{2}$ "	12	0	0	13	10	0*	12	10	0
9	12"	10" x 8"	3 $\frac{1}{4}$ "	19	10	0						

Lenses paired for stereo work, 7/- extra. * To order only.

Lenses No. 2 to 6 are supplied in Aluminium Iris mounts, unless ordered in brass mounts. Lenses No. 7 and 9 are supplied in brass. The lenses are of necessity large, in order to enable the aperture to be obtained, but the mounts are made as small as possible in order to save unnecessary bulk and weight.

ANOTHER SPECIAL OFFER.

The method which we adopted in April 1907, of making known the advantages of our new Isostigmat lenses, by selling them for one month at a reduced rate, was a complete success. The enormous number of lenses thus sold, enabled its superb qualities to be at once realized, with the result that the demand then created has steadily increased ever since. To advertise this new series, we are prepared, during

The month of September, 1908 only,

for cash with order, either sent direct or through your photographic dealer, to take orders for this New Isostigmat Lens (Series I. f4.5 only), at the following prices:

No.	Focus.	Price in Iris mount.			Price in focussing mount.			Price in sunk mount for Reflex cameras.		
		£	s.	d.	£	s.	d.	£	s.	d.
2	3"	2	15	0	3	7	6	3	0	0
3	4 $\frac{3}{4}$ "	3	12	6	4	10	0	3	17	0
4	6"	4	2	6	5	1	6	4	10	0
5	7 $\frac{1}{2}$ "	5	10	6	6	10	0	5	18	0
6	8 $\frac{1}{4}$ "	6	11	3	7	10	0	6	19	0
7	9 $\frac{1}{2}$ "	9	0	0	10	5	0	9	7	6
9	12"	14	12	6						

All orders, with remittances, must reach us before the last day of September, 1908, except those coming from abroad. We are prepared to supply upon these terms for any foreign orders posted during October, 1908, after which time full prices will be charged.

Some annoyance was caused in our last year's offer, owing to the delay in executing all the orders. We were overwhelmed with the number of orders and could not increase our works with sufficient rapidity. Such a delay is not likely to occur in this case, as we have now facilities for manufacturing in very large quantities, but it is advisable not to leave ordering till the end of the month. We do not take lenses in exchange at the reduced rate.

R. & J. BECK, Ltd., 68, Cornhill, London, E.C.

1889 ~ 1908
19 Years of Supremacy



Delicate,
Mellow
High Lights.

Simple to use,
Full of
Artistic possibilities

Rich,
Pure Black
Shadows.

The Original Gaslight Paper.





THE LATEST IN APPARATUS & MATERIAL.

The New Model of the Busch Leukar f/6.8 Anastigmat.

THE illustration of the six lens double anastigmat, which we reproduce below, will show our readers that the Leukar, which it represents, belongs to a group of instruments which includes some of the greatest triumphs of the optician. We have had an opportunity of testing recently a No. 2 Leukar, of 5 $\frac{1}{2}$ in. focus. Like the rest of the series, its largest aperture was f/6.8, and when this was used we found that it covered a quarter-plate from corner to corner with the most critical definition. It would do more than this, for it allowed the front to be raised through some little space before there was any perceptible falling off in the definition at this large aperture, while by stopping it down a little we found that it would cover the plate perfectly even with the maximum rise of the camera.

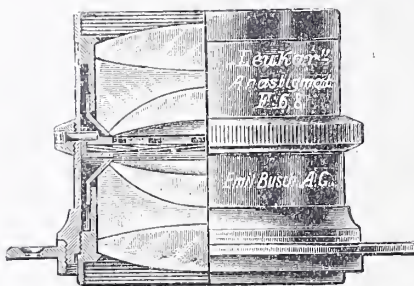
The No. 2 is a quarter-plate lens, and is put forward as pre-eminently a hand camera instrument; but we found that it was equally serviceable as a wide-angle half-plate lens, covering a half-plate sharply all over with f/16, and with still smaller stops the area of good definition was further increased. Examining it for flare, we were unable to find any trace of it; indeed, the form of the combination, as is well known, is particularly favourable towards the complete elimination of this. Distortion was not perceptible on the extreme

margins of the plate when the complete doublet was employed, and, what was still more to the credit of the lens, the back combination could be used by itself without distortion being noticeable. The back half covered a half-plate and more very effectively.

Curvature of the field, spherical and chromatic aberrations, and coma appeared to have been corrected most effectively over a large area; certainly our tests, and they were far more critical than the lens would receive in everyday use, failed to show the presence of these defects.

The lens sent us was in every way an example of good workmanship and finish. The polish of the external surfaces was all that could be required, physical defects were conspicuously absent, and in mounting, centring, and the mechanical arrangements generally it was what a first-rate lens should be. An amateur photographer with such an instrument on his hand camera is admirably equipped for any subject that may be met with.

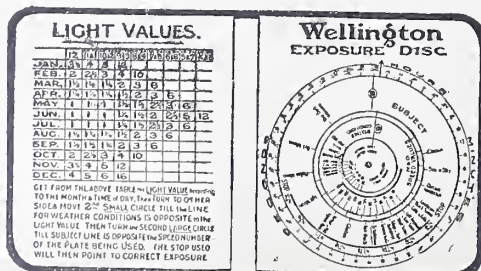
The Leukar anastigmats are made by the Emil Busch Optical Co., of 35, Charles Street, Hatton Garden, London, E.C., and are obtainable through any dealer. The No. 2, 5 $\frac{1}{2}$ in. focus, in ordinary brass mount, with iris diaphragm, sells at £3 15s. It is listed in all sizes from 2 $\frac{1}{2}$ to 18in. focus, and in various forms of mount to suit different requirements.



The Wellington Exposure Disc.

ANYTHING that helps the user of plates to expose them more accurately is in the interest of the maker of the plates, since the temptation to attribute to want of quality in the material what is actually due to unskilful use of it is a powerful one. Hence have come some of the most convenient aids to exposure that are now available, and it is no doubt to the desire that their plates shall be correctly exposed that the production of the "Wellington Exposure disc" is due.

The apparatus which bears this name is an exposure calculator on the slide rule principle. There are four concentric circular scales, of which two are capable of being revolved on the central pin, the other two, the innermost and the outer one, being fixed. The innermost circle contains a series of numbers marked "light values." The light values are numbers for different times of the year and hours of the day, which are given in a table which faces the calculator.



Having found the "light value" number for the day and time when the exposure is to be made, the next circle is rotated until the line describing the weather conditions at the time comes against that of the light value. The next circle gives various classes of subjects, and it is rotated until the class of subject we are photographing comes against the H. and D. number of the plate in use.

The scale of stops will then be found in such a position that we can read off at once against the stop we propose to use the exposure which it will require. The whole calculation does not take half a minute to perform, and the reading is direct when obtained; that is to say, it is the actual exposure, and not a number which has got to be multiplied or divided further before we can find out what the exposure actually is.

It is a thoroughly sound and useful little appliance, and should meet with a ready sale. It is listed at the low price of ninepence.

Wellington

S.
C.
P.



THE
"QUEEN"
OF
GASLIGHT PAPERS.





"The time has come, the Walrus said, to talk of many things."

ONE of my dictionaries (I am too lazy to refer to more than one) defines a critic as "one skilled in estimating the quality of literary or artistic work; a fault-finder." The definition is certainly rather unkind; it implies that no sooner does a critic begin to estimate the quality of some artistic (ha, ha!) work or other than he also begins to find fault. The fault-finding follows as a natural consequence, and as fault-finding is one of the very easiest accomplishments under the sun, I cannot for the life of me understand why it is that critics put on so much side. For my part, I place critics very low down indeed in the scale of the animal creation. In fact, I place some of them in the vegetable kingdom, and they are poor specimens even there. No decently grown turnip need blush by comparison with some of them.

* * *

I believe that photographers as a class suffer more from the critics than does any other section of the community. Any half-baked clump considers himself able to criticise a photograph. He might have enough commonsense to realise that he is not competent to criticise a home-made petticoat or a patent dust bin, but show him a photographic print and he will pass an opinion on it without stopping to wet his lips or pray for guidance. He speaks with unhesitating confidence, and what he says is absolute rot ten times out of nine. Let there be in the picture a clock by which he can see the time and he will laud to the skies the print and the taker thereof. Give him f/32 and ferrotyped P.O.P. and he will smile upon you the wide smile of well-meant but sadly misplaced approbation. He considers himself a jolly good judge of a photograph, but as a matter of cold solid fact his praise is the most dire condemnation that could be passed upon your work. When I consider I have turned out a piece of good photographic work my usual test is to show it to as many of these confident critics as I can round up (and goodness knows there is no lack of them), and if they with one accord pronounce it hopelessly bad I pat myself on the back and say, thank goodness I've got a good thing at last. On the other hand if they are unanimous in praising a print I promptly destroy it as being too bad to keep.

* * *

All critics are bad, but some are worse than others. A particularly mean variety is the one who takes a print and marks it out in sections so that it looks like a map of a land sale, and then letters the plots or numbers them so that he can refer to them in a long farrago of words in the course of which he explains that the picture is absolutely bad because the principal object is at A3 instead of being placed in the correct position at J25. If you ask him why J25 is the correct position he talks for two hours and a half like a cheap parrot with delirium tremens. If he can find the where-withal he will very likely perpetrate a series of what he calls explanatory drawings, which resemble an eruption of Vesuvius or a diagram of the viscera of an earwig. It is never safe to question a critic. It only gives him just the opportunity he is yearning for; and once you start a critic talking you can only stop him with something as effective as a club or a shotgun.

* * *

As the dictionary wisely observes, a critic is a fault-finder. His criticism is what is known as destructive. This is wrong; that is bad; the other is inexcusable. The composition is weak, the perspective displeasing, the tone values incorrect. The print is an unsuitable colour, the shape is irritating, the mount inharmonious. The critic has to say all this in order to give the impression that his standard of art is a lofty one, and his taste fastidious to a degree. The silly goat. He doesn't really know the difference between a good picture and a Christmas almanac. He has learnt by heart a long string of cant phrases about tones and textures and leading lines, and he coughs up a selection of them at random. If photographs were all turned out to satisfy the

ten a penny rules of the pictorial critics life would not be worth living, and the suicide statistics would jump like a kangaroo that has inadvertently sat down on a prickly cactus.

* * *

Contrary to my usual custom, I have just paused to read through what I have so far written, and it seems that I have rather put my foot in it. I have practically said that all critics do nothing but find fault, but that some critics express unqualified approbation. Which, as my esteemed but deceased friend Euclid was wont to remark, is absurd. But then, critics are absurd. However silly and contradictory may be my remarks about them they are appropriate to the subject.

* * *

It sometimes happens that one whose work is criticised has the audacity to defend himself against the critic, and I should have a very poor opinion indeed of anyone who failed to chaw up a critic without the slightest difficulty. Indeed, critics are such a feeble folk that it is almost cowardly to hit them. Their strength lies in their weakness. The other day I came across one of the very funniest anti-critic defences that I ever hope to see. Referring to a photograph of some mountain scenery, the critic had observed that the representation of the mountains was lacking in dignity and impressiveness. Any critic would say that—even a beginner at the game. It is the proper thing to say about photographs of mountains. But up rose the producer of the print and declared that dignity and impressiveness were not attributes of mountains, but that they were mere sensations or emotions of the mind, and that if the critic failed to see the dignity, etc., it was because his mind was defective. The photographic process had correctly recorded the mountains, and the sensation of impressiveness, etc., was to be supplied by the critic himself. Talk about laughing! I guffawed my uvula into a sailor's knot.

* * *

What a weapon of defence against the critics is here provided. You show a critic a print of a commonplace subject—a print, moreover, suffering from spotted meningitis, and when he says there is no beauty in it you blandly remark, "Beauty, you old fossil? Beauty is merely a sensation of the mind. Of course you can't see any beauty in it, because your mind is too defective to supply it, you slab-sided incomplete old baboon!"

* * *

Well, enough of the critic. We must not be too hard upon him. And I wish to remark that if I have appeared to speak other than kindly of critics as a class, I specifically omit from the application of my observations the particular individual who thinks he is a critic and calls himself "The Bandit." He is no critic. He talks sense. And he talks it in such an irresistibly fascinating manner that I here and now looks towards him, and I likewise bows.

THE WALRUS.

SUBSCRIPTIONS.

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PHOTOGRAPHY

A JOURNAL FOR EVERY CAMERA USER.

EDITED BY R. CHILD BAYLEY.

PUBLISHED WEEKLY.

SEPTEMBER 15TH, 1908. TUESDAY. No. 1,036. Vol. XXVI.



CRITICISING HIS PORTRAIT.
By RALPH CRUMPTON.

AN INTERESTED SITTER.
By CECIL GREEN.
(Certificate.)



A GENTLEMAN OF PARTS.

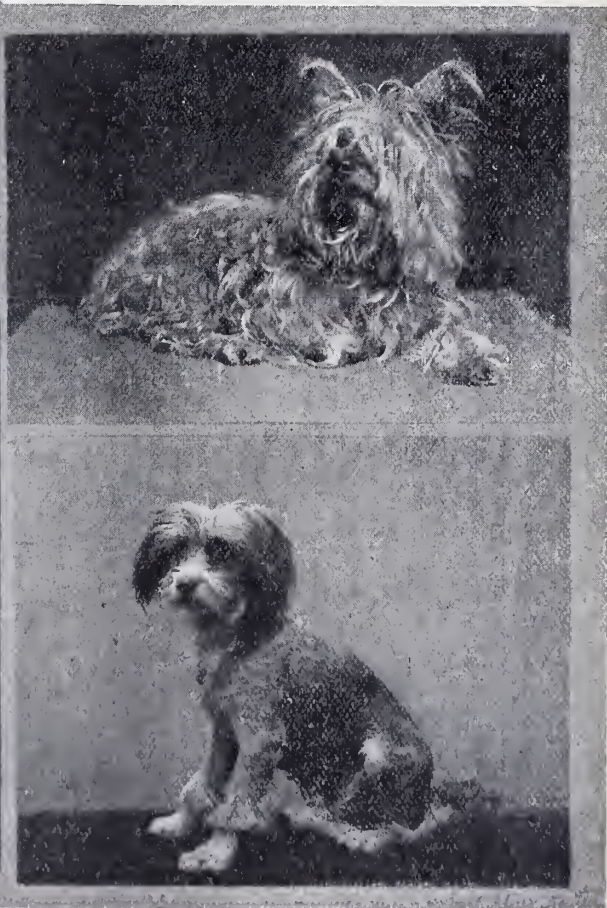
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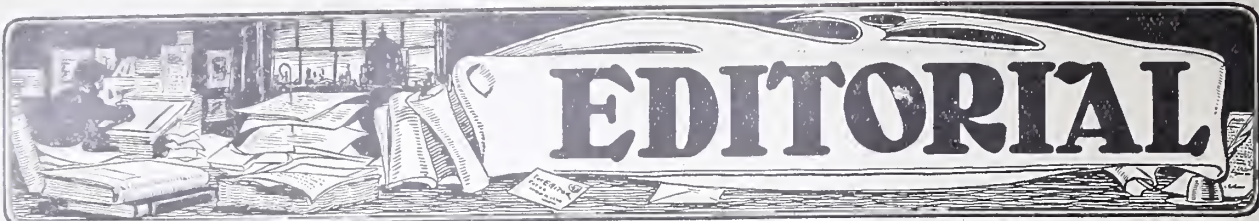
By MISS MORDAUNT.

WAITING FOR MASTER.

(Certificate.)

By A. FRANCK.





The Photographic Salon.

The Photographic Salon of 1908 has opened its doors, and upon another page this week will be found a notice of the pictures which are to be found at it. The anticipation that this was to be an "oil" year is hardly justified, at least if we are to judge from the prints which give any indication of the process employed. We know that there are many oil prints at the Salon, but there are comparatively few that announce themselves as such, and quite a number of "oils" which cannot be distinguished from carbon or gum prints. The feature of the show beyond a doubt is the very fine collection of Autochromes, which occupy the centre of the gallery, and are very well displayed. The selection seems to have given rise to quite an unusual amount of ill-feeling, but it has resulted in an exceptionally interesting and representative show, so that those who are not themselves among the rejected have little or no cause to complain on that score.

'Bus-top Photography.

There are many worse positions for the photographer who wants to secure a series of town views to take up than the front seat on the top of a bus; and we commend the idea to those of our readers who have not yet tried it. A horse 'bus is better than a motor 'bus, both on account of less vibration and from its slower speed. The front rail is lower also, and this is a convenience; but good work may be done from both. We have often thought it strange that it is so seldom, comparatively, that we see any 'bus-top photography being attempted in London. The vantage ground has so many good points. There is little or no trouble from figures too near the camera, or from people staring at the camera. The 'bus is not so lofty as to make the view seem unnatural in its perspective. A capital afternoon's work could be done on any of the main routes, and if we might add one more hint it would be, after going over the ground on the front seat, to go over it again on the back one, looking the opposite way. A fresh set of pictures confronts one, there is usually a much clearer road behind than in front, and there is no risk of the whip waving in front of the lens just at the critical moment.

Home-made Colour Screens.

One of the fascinations of orthochromatic work to the amateur photographer undoubtedly lies in the

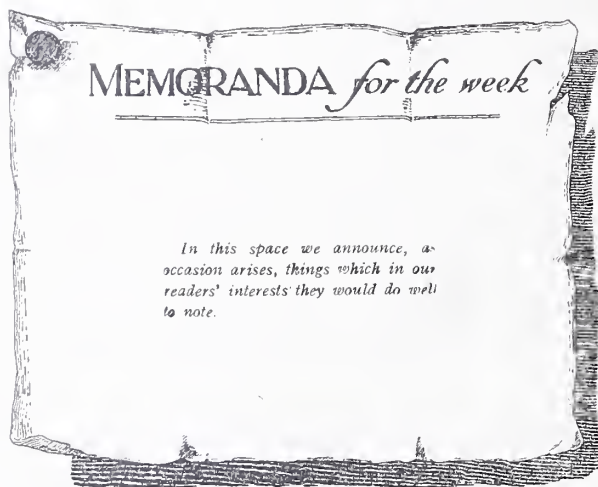
control which he can exercise over the colour rendering by the selection of a suitable screen for the work in hand. To be able to do this he must have more than one screen, and the chances are that in such a case he will prefer to make his own. This week our principal article deals with this subject of home-made screens in a practical but concise manner, and we have no doubt will be the means of inducing many of our readers to try their hands at screen making.

The dye recommended by our contributor is naphthol yellow, but the fact that there may possibly be some difficulty in purchasing this dye if the would-be screen maker is not living in a large town need not be a deterrent. Every village almost to-day has a shop which sells packets of dyes, and the brightest and most intense yellow has generally for its basis naphthol yellow, if, indeed, it does not consist entirely of it. Nor is this a case where purity is all-important. The colour of the dye is from this point of view what most concerns us; and although we do not believe in makeshifts as a general rule, if an intense yellow dye is selected, and it is found that it will impart its

colour to the gelatine film, it will serve. It may not be the ideal light filter, but it will at least give a very much improved rendering with an orthochromatic plate, and the only direction in which there is likely to be any perceptible difference between it and the most orthodox of screens will be that the makeshift may need a little longer increase of exposure for any given extent of correction.

Light and the Exposure with Screens.

To judge from enquiries which reach us from time to time, there are many workers who do not quite understand how it comes about that the screen which may need a four times increase under one set of circumstances may under others only want twice the normal exposure. Another aspect of the same fact is that in measuring the increased exposure which a screen necessitates it must be done by the light in which the screen is going to be used. The reason for this lies in a nutshell. A yellow screen increases the exposure because it cuts off some of the blue and violet light, to which the plate is most sensitive. If the light in which it is used is rich in this blue and violet, as is the case with ordinary daylight, the effect of the screen which



cuts it off is a very marked one. But if, on the other hand, the light is already poor in these rays, as is lamp light and artificial light generally, the interposition of the screen, manifestly, can make very little difference. Daylight does not vary very greatly in this respect, except towards the beginning and end of the day, so that for ordinary landscape work a single measurement of the increase in exposure which the colour screen calls for will be sufficient; but if a colour screen is to be used both for daylight and for artificial light, then it is an absolute necessity that the increased exposure which it entails shall be measured with both lights. The subject is one upon which we have an article in type, so we will not refer further to it in this place.

The Printing in of Clouds.

A great many of the landscapes which are sent in to our competitions suffer from the fact that the clouds are printed in much too heavily. After all, whether the day be sunny or dull, the sky is the source whence the landscape is lit; in fact, this is even truer on a dull day, when the whole of the sky is acting as the source of light, than it is when a great part of it is clear blue. That being the case, the sky must be rendered, on the whole, lightly and delicately. To do this without some part of it being too dark, the negatives from which clouds are to be printed must be kept thin, so that even their densest parts will print before the thinnest parts have gone too far. The highest lights in the sky must be as nearly as possible the lightest tone the printing paper will give; but nevertheless they must be a tone, and not blank white paper. These conditions may seem to be somewhat hard, but they have got to be complied with if the addition of clouds is to be an improvement and not a detriment to the picture.

CAUSE AND EFFECT.

The finest outfit in the club is that of Dicky Jones; You'll hear him sing its praises in enthusiastic tones. Of showing off its many points he's never known to tire, Whilst the members make big goo-goo eyes, and wonder and admire.

The lens is quite a marvel—it's an Orthostigmat—
And the shutter's accuracy is a thing to wonder at.
The extension's forty inches, though it's but a
5 by 4;

It has ev'ry sort of movement, and at least a dozen
more,

And Jones will often tell us, when he's done explain-
ing it,

That it cost him twenty guineas, and was worth it,
ev'ry bit.

The poorest pictures in the club are those of Dicky
Jones,

And he'll tell you what the reasons are in discontented
tones.

They're often out of focus, and he'll say the cause of
that

Is chromatic aberration in the Orthostigmat.

And when he makes exposures much too little or too
long,

Why, he's always had suspicions that his shutter
speeds were wrong.

If his architecture's tipsy, he will tell you with a grunt
That he had to tilt the camera for want of rising front.

If the picture's flat and foggy, it's the bellows leaking
light.

In short, there's always something that's in need of
setting right.

I sometimes think if Dicky Jones would spend an
hour or two

In trying to discover what he can or cannot do,
If he'd estimate his distances with rather greater care,

And always see his camera was set up straight and
square,

If he'd use its many movements to the ends for which
they're made,

And work out his exposures with a meter's simple aid,
If he'd take some small precautions to protect his
plates from light,

He might—I won't be positive, but still I say he
might—

He might before the year is out get something decent
done

For he's got a ripping outfit, as I said in Stanza 1.

WEEK'S MEETINGS.

MONDAY, SEPTEMBER 14TH.

Attercliffe P.S. "Ozobrome." Horace Nixon.
Wallasey A.P.S. "Laniern Slide Making." C. G. McCaig.

TUESDAY, SEPTEMBER 15TH.

Windsor P.S. "Cardiff Past and Present." I. V. Evans and I. J. Chorley.
Central Y.M.C.A. P.S. Chislehurst.
U. Stereoscopic S. Annual Competition.

WEDNESDAY, SEPTEMBER 16TH.

South Suburban P.S. Portfolio Criticism and Prin Competition.
Rugby P.S. North and South Kilworth.
Everton C.C. "Architecture for Photographers." F. C. Creswell.
North Middlesex P.S. Ongoing Print Competition.

THURSDAY, SEPTEMBER 17TH.

Southend-on-Sea P.S. Prize Slides.

FRIDAY, SEPTEMBER 18TH.

South London P.S. Leigh and Benfleet.

SATURDAY, SEPTEMBER 19TH.

Preston C.C. Freckleton.
Paisley Philosophical Institution. Eglinton Castle.
Glasgow Southern P.A. Clyde from Cambuslang.
Bowes Park & D.P.S. Ware.
Chelsea & D.P.S. Golders' Green.
Denuistoun A.P.A. Milngavie and District.
Todmorden P.S. Greens Clough.
Halifax C.C. West Vale District.
Hull P.S. Hedon and Paull.
Southall-Norwood C.C. Uxbridge.
South Suburban P.S. Leigh and Benfleet.
Wallasey A.P.S. Raby.
Chelmsford P.S. Ingatstone.
Small Heath P.S. Sutton Park.
Manchester A.P.S. Mere Clough.
Boro. Poly. P.S. Yalding.
Govan C.C. Milngavie.
Darlington C.C. Coniscliffe Moor.

MONDAY, SEPTEMBER 21ST.

Southampton C.C. "Photography as an Educational Force." F. G. Ryde
Bradford P.S. Lecture.
Walthamstow P.S. Ten Minutes' Papers.
South London P.S. "Tour in Holland." Stanley Fincham.

Colour Screens.

Tells how Screens for Orthochromatic Work may be made.



ANY amateurs who do not use orthochromatic plates explain their objection to them by pointing out that to secure any real benefit a colour screen must be used, and they do not feel disposed to buy one. The objection is not one which ought to carry much weight, since, as I hope to be able to show, satisfactory colour screens can be made very

cheaply and with very little trouble.

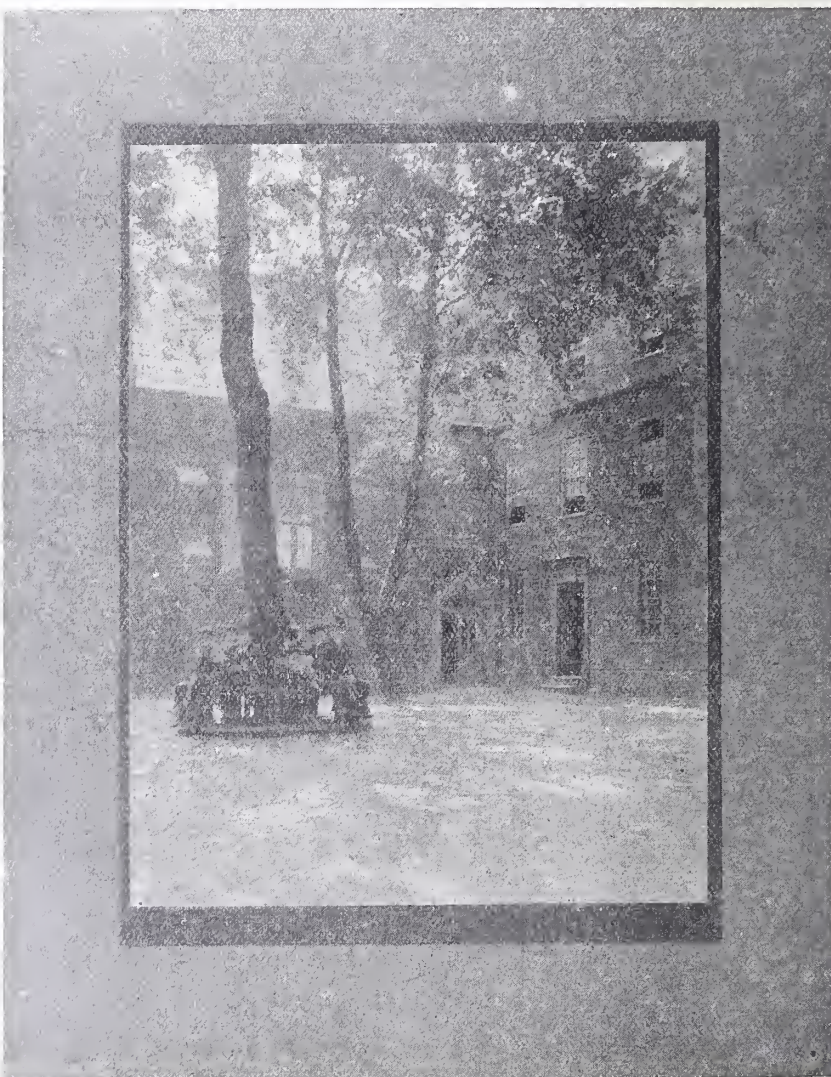
A plain unprotected piece of stained gelatine will serve excellently as a colour screen for a little while, but it soon gets injured, and is no longer any use, and the time spent in making it is wasted. It is very little more trouble to make a screen which will last uninjured as long as the lens itself, and any amateur photographer who sets out to make his screens at all should make them of this kind.

The materials required are very few. A dram of the aniline dye known as naphthol yellow, a few lantern plates, and some Canada balsam and binding strips complete the list. Naphthol yellow can generally be got to order by the chemist and druggist, and I believe some of the big photographic dealers keep it. If it is not obtainable, one of the cheap packets of bright yellow dye, which can be bought almost anywhere, will provide a material which can be used almost, if not quite, as successfully. Half a dozen lantern plates will be none too many to use, as while we are about it it is little more trouble to make six screens than one.

The plates are placed in clean hypo for a quarter of an hour to fix, and are then washed just as negatives are washed and quite as thoroughly, and stood up in a place free from dust to dry. This should be done a day or two before the actual making of the screens is put in hand. At the same time we may make the dye solution by putting a dram of the yellow in ten ounces of cold water and setting it aside, with occasional shaking until

it has dissolved. It is best just before use to filter the solution through a tuft of cotton wool placed in a funnel, but this is not a necessity.

The lantern plates are placed dry in a dye solution made by diluting one ounce of the stock solution with four ounces of water. If six screens are to be made, four should be dyed in this bath and two left until the four are finished, and then dyed in the same bath after a pint of water has been added to it. Five minutes should be given for the dyeing, and at the end of that time the plates should be taken out and placed in a dish of clean water. They will all appear deeply



A QUIET RESTING PLACE.

Awarded a Certificate in the March Competition.

By DAVID ORR.

stained except those which were dyed in the weaker bath. As it is well to have a series of screens of different depth, the next stage consists of washing out some of the dye. One of the deeply stained plates may be left under the tap for a minute and then be stood up to dry. This will form our deepest screen. The next may be washed for five or ten minutes, and another for twenty minutes. Of the more lightly dyed screens, one may be rinsed for a minute and the other washed for five minutes. These directions must not be slavishly followed, but the duration of the washing must be decided by holding the screens up in front of a sheet of white paper *in daylight* and judging their depth by the eye. Daylight is necessary for this, as artificial light is most deceptive, and the eye test is a necessity also, because different makes of lantern plate differ enormously in the ease or otherwise with which they part with the dye, and the character of the tap water and its temperature also affect the result. For most of the subjects for which the amateur is likely to use his colour screens the more lightly dyed screens will be found the most useful. Still, it is well to have one that is deeply stained. After the washing they are put aside out of the reach of dust to get thoroughly dry.

Some workers dye two plates with different dyes or to different depths, and cement them together. But those who have never done any cementing with Canada balsam will, if they are wise, confine their early efforts to cementing a plain glass on to a dyed plate, as this is the easier. For each screen which we propose to cement we shall need a cover glass, which may be any spoiled lantern plate that has had its coating removed with hot water, and has been thoroughly cleaned and dried. The dyed plate should have a little lump of the balsam (about the size of a shilling if it is a lantern plate) placed in its centre, and should then be put in a warm place for the balsam to soften. An oven is generally suggested, but it must not be at baking heat or anything like it. It ought not to feel much more than com-



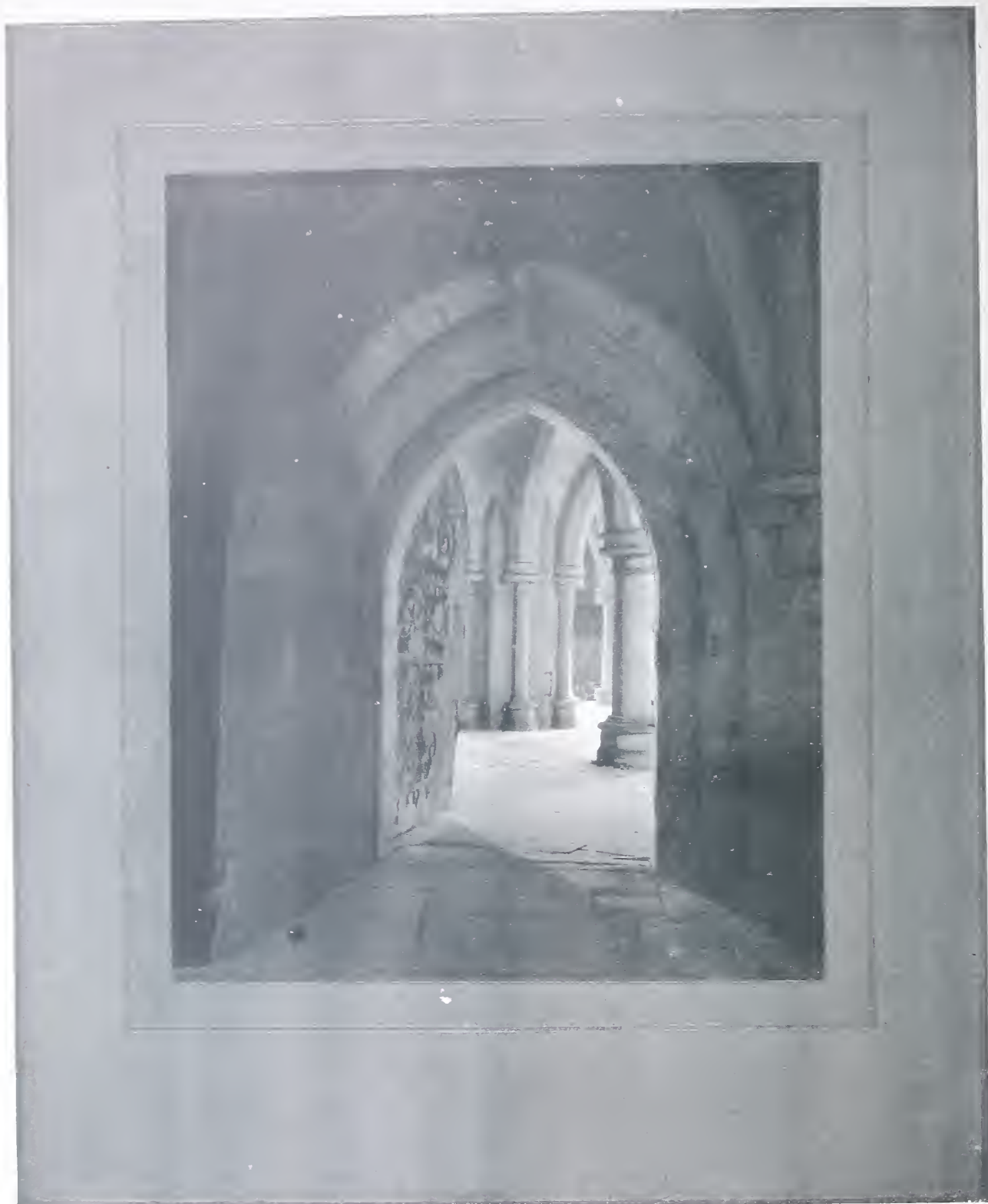
THE VILLAGE FIDDLER.

BY MR. AND MRS. ALFRED BRACEWELL.

Awarded a Bronze Medal in the Advanced Workers' Competition for May.

fortably warm to the hand. The plates may be arranged on a sheet of card and left in this for a quarter of an hour, and the cover glasses may be put in at the same time to get warm. Then comes the crux of the cementing process, where many seem to fail; yet if done with due care in the proper way it is not difficult.

The dyed plate is placed flat on the table, and one of the cover glasses, dusted to make sure it is perfectly clean, is placed exactly on the top of it, with one edge resting on the edge of the plate; but it is held up with a pin under the opposite edge, so that its surface does not touch the balsam. It is then gradually lowered on to the balsam, so that it first touches it at the part nearest to the edge that is resting on the plate. The



WELLS CATHEDRAL—ENTRANCE TO THE UNDERCROFT (SEE PAGE 371 LAST WEEK).

BY F. H. CLIFFE.



lowering is continued till it is in contact all over and the balsam is gradually working out towards the edges. The

great thing is to avoid enclosing any air bells in the balsam, as it is almost impossible to get rid of them if this has been done. For this reason the cover glass must never be lifted up from the plate when once it has touched the balsam, or air bells are certain to be formed.

No attempt must be made to get rid of surplus balsam at this stage, and as a good deal is sure to squeeze out, it is best to support the plate on two or three pieces of thick card cut a little smaller than the plate itself, so that

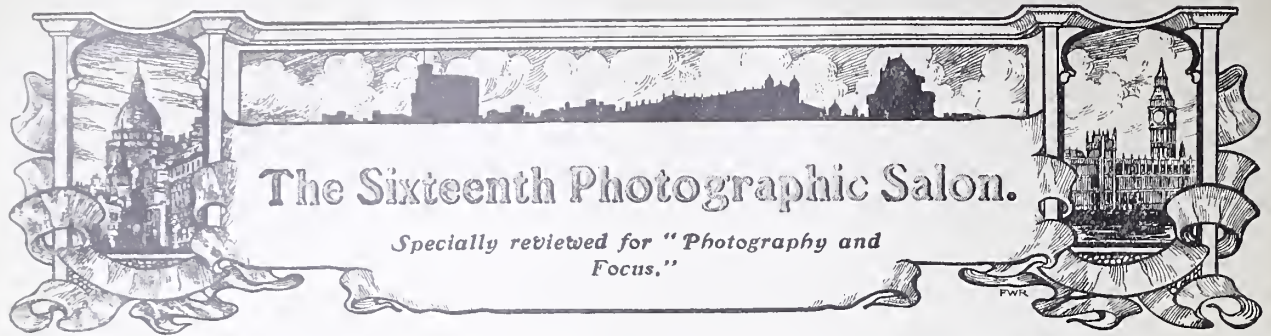
the balsam as it works out does not cement the plate to its support. When the balsam has reached all four edges, which it can be helped to do by gentle pressure with the fingers where it is seen to be necessary, always driving the balsam towards the edges and never in any other direction, the screen may be put away for a few days for the balsam to harden. Some people use clips to press the two glasses together, but a weight is to be preferred, and a bottle or jar filled with shot, or sand, or even water, makes a very effective weight. It should be smaller in diameter than the plate on which it stands, and should be placed on two or three pieces of paper to equalise the pressure.

After the lapse of a week the balsam which has squeezed out may be removed by scraping, and the edges cleaned with a little benzine and a cloth. As soon as they are seen to be free from the excess of balsam they should be bound round neatly with lantern slide binding strips, and when these are dry, but not before, on account of the risk of disturbing the cementing, for it takes months for balsam to get really hard, the glass may be cleaned on both sides, and the screen is finished.

If the screen maker finds that the balsaming operation is one which he cannot very well manage, it may be omitted and the screen simply bound up with a protecting glass, like a lantern slide. But such a screen is never quite so good, as it contains two more reflecting surfaces than the cemented one, and one of these surfaces is more or less a diffusing surface. This can to some extent be remedied by giving the dyed gelatine side of the lantern plate a coat of negative varnish, omitting the cover glass altogether if the screen can be properly taken care of without it. But the balsaming is not actually difficult if the directions given above are followed step by step.

The procedure may seem elaborate, but this is due to the fact that each little stage has been described in detail, so that even the most inexperienced worker may have no chance of going wrong. Actually the manufacture of half a dozen screens is a very easy operation, and it is not at all a tedious one. The only remaining operation is to measure the extent to which the exposure must be increased with each, but that must form the subject of a separate article.

HAROLD RAE.



THE sixteenth annual exhibition of the Photographic Salon opened to the public on Friday last, and will continue until October 24th. It is held in the Gallery of the Royal Society of Painters in Water Colours, 5a, Pall Mall East, London, S.W., and is open daily from 10 a.m. to 6 p.m., and on Wednesday and Saturday evenings from 7 to 9.30. As representing the very latest in pictorial photography, both in monochrome and in colour, it is well worth a visit from every photographer; although it is only fair to warn those who like "the usual thing" in photographs, that it is almost, if not quite, unrepresented in the exhibition. There is much that is eccentric, much that is puzzling, much that many would regard as of "the spoilt print" type, but there is nothing on the walls that has not passed a jury which, if small, is composed exclusively of men of recognised standing.

The selection committee as given in the catalogue consisted of J. Craig Annan, M. Arbuthnot, W. Benington, A. L. Coburn, George Davison, Demachy, Frank Eugene, Heinrich Kühn, Steichen, Stieglitz, and Clarence White. The two last selected in America, Demachy acted in France, so that the actual committee in this country consisted of Annan, Arbuthnot, Benington, Coburn, Davison, and Steichen. Mr. Davison and Herr Kühn are not represented on the walls, but the remaining members of the selecting committee have no fewer than 116 exhibits out of a total of 203—considerably over one half of the exhibits being thus provided by nine members of the selecting committee. This whole-hearted appreciation of their own work has been the cause of no slight recrimination and anger on the part of some of the less modern members of the Linked Ring, who find their work rejected *en bloc*, or else have just one or two small prints accepted and tucked away in a corner—treatment almost more contemptuous than complete rejection would be.

The galling thing about it all, too, is that the exhibition is all the better for it, and we shall be very much mistaken if the general opinion of the Salon of 1908 is not that it marks a decided advance on its predecessors. It is no longer a mere echo of the pictorial section of the "Royal," which it has been for the last few years—a "Royal" without the added attractions of scientific, technical, and apparatus sections. It has lost the heavy respectability, the orthodox air, which seemed to settle down upon it after the Maskell era. It stands, imperfectly it is true, but as well as it could with the materials at hand, it stands for the latest phase of pictorial photography. It may shock and startle many, but at least it is representative. And whether we like it or not, it represents a photography which in a few years will be as humdrum and as orthodox as that which it has displaced.

Another feature which marks the Salon of 1908 is that here for the first time we see the results of attempts to do pictorial work, not in black and white, but with the enhanced power conferred by the Autochrome plate. One-third of the total exhibits are Autochromes, and, well shown as they are, they form a most interesting and attractive feature of a most interesting exhibition. Of the two by Craig Annan, "The Blue Gown" is the better, while of Coburn's eight, we like the portraits of Bernard Shaw and of Miss Lillah McCarthy as well as any. But Baron de Meyer's flower and fruit

pictures and Steichen's wonderful effects of sunshine are a revelation of the powers of Messrs. Lumière's plate in capable hands. It is hard to realise that it is little more than twelve months ago that *Photography* was familiarising the photographic public here with the Autochrome plate and its possibilities, while contemporaries were silent, or sneering, or glorifying the wonderful powers and adaptability of the "Warner-Powrie" process. Perhaps the most remarkable of all these Autochromes is the dinner party picture by Steichen, in which we see figures seated round a table illuminated apparently by nothing more than a few lamps or candles with red shades. It is difficult to understand how such a result could have been obtained on a plate of the speed of the Autochrome; but there it is.

Amongst the 130 or so monochrome pictures on the walls, the eight by Mr. Craig Annan form a remarkable group—remarkable alike for their quality and for the uniformity with which the high level of work is maintained. They are masterly examples of what photography can do in competent hands, and, what is more, they rely on purely photographic character for their effect. We do not say that they are or are not examples of pure photography, but we do say that in these there is nothing to suggest the intervention of brush or paint work of any kind. Near them will be found a group of three oil or gum prints by Archibald Cochrane, of which at least one—"Horses Drinking"—is notable. Mr. E. Warner's "Navvies" is, apparently, in two or three colours, and is most effective. Steichen has not only a number of Autochromes, but a fine series of monochrome pictures. The portrait of Lady Ian Hamilton and the "Nocturne, Versailles," are both examples of a curiously simple lighting scheme, employed with great effect. Coburn's work this year is hardly up to what he has shown before. The Franco-British Exhibition has provided him with more than one theme, but the reproductions in the "Pall Mall Magazine" recently were certainly to be preferred to these large and rather crude prints. We like Mr. Coburn best in portraiture. Baron de Meyer has some strong portraits here, although his Autochromes are the most interesting of his exhibits this year. "The Chinese Idol" and "Baroness de Meyer" take our fancy most. Demachy is represented by seven prints which maintain his reputation as a picture maker, although they do nothing to enhance it. One or two of Mr. Arbuthnot's pictures, notably "The Beach" and "The Hillside," must not be passed over; but we rather grudge the wall space given to his and to Mr. Benington's pictures, which as a whole are certainly inferior to earlier work by these exhibitors.

Want of space prevents us from drawing attention to all the work in this exhibition which deserves attention; we must content ourselves by saying that amongst the pictures we have not mentioned are many of great merit, and that there are very few which do not show distinct artistic feeling and purpose. The exhibition is one which is intensely interesting, and ought to prove an excellent complement to that which will open next week at the New Gallery. We should like to see many of those who are almost or quite unrepresented at the Salon exhibiting at the R.P.S., and we hope that the resumption by the Linked Ring of its natural sphere of activity will lead to its increased strength and prosperity. Certainly the show seems to be that of a live active society, which could hardly be said of its last few predecessors.

HOLIDAY INFORMATION.

WESTERN MANXLAND.

Those who seek to combine health and quiet recreation with the pursuit of their hobby will find in the fishing villages on the Western and south-western shores of the Isle of Man exceptional attractions. The sarcasms directed against the bourne of trippers from Liverpool, Glasgow, etc., have no application to the interesting and charming district of which Castletown, Port St. Mary, Port Erin, and the neighbouring villages are the chief centres.

While the general scenery in the west of the island cannot be compared with the Highlands of Scotland, the Lake District, or North Wales, the combinations of moorland, seascape, and verdant pasture, with the delightfully invigorating atmosphere so characteristic of Manxland, conspire to make this one of the most healthful and pictorially attractive spots in the United Kingdom.

Perhaps the chief feature of interest to the photographer is the admirable variety of sea and landscape. For topographical views there is an almost bewildering variety of birds' eye panoramas, and, varying with the meteorological humour of the moment, glorious seas and placid inspiring sunsets, sunlit cliffs and bays, gorgeously coloured heather and gorse, with a score of shades in seaweed and boulder, while the sea is remarkable for its clear and azure colour. Fishing and sailing scenes, quaint fisher folk and quainter dialect and costumes, serve to provide a continual feast of interest.

Plenty of sea studies are available in a dozen of the surrounding bays or along the cliffs and shores from the beetling heights of Bradda Head to Castletown Bay.

The sunsets to be seen from the western watering places of the island—especially Port Erin—surpass anything I have seen elsewhere from the pictorial standpoint. When the summer sun is falling against the Irish skies in its unique splendour the wet sands of a falling tide provide the pictorialist, evening after evening, with unlimited scope for picturesque photographic effect.

Another pleasing feature for quick-shutter work in this locality is the exceptional opportunity for sea-bird studies. The gulls are remarkably fine in size and plumage, and from early morn to dewy eve hover restlessly round the rock-bound coast. At Port Erin, and Port St. Mary especially, when visitors tempt them close to hand by table leavings after meals, the gulls approach within easy snapping distance of the lens, and poised against the breeze, and with excited and eerie cries of anticipation, the birds hover round in hundreds, forming a picturesque and interesting ensemble.

For woodland and *genre* studies the woods and river of Silverburn, near Ballasalla, provide almost unlimited

opportunities. This delightful glen extends for several miles, and includes the ruins of Rushen Abbey and Monk's Bridge, the latter ideally situated. In August and September the grain fields with their poppies and marguerites, and the operations of the harvesters, provide ample variety for picture making, while there are old farmsteads, quaint draw-wells, and plenty of cattle and sheep for those in search of rural studies.

Add to these photographic attractions the glories of the grim old pile from which Castletown takes its name, with its antiquated moat; the graceful crags and rocky headlands of Bradda Head, Fleshwick Bay, the Sound, Calf of Man, and Spanish Head, and the camerist has a number and variety of photographic attractions within a few miles reach of each other which no other part of the kingdom can excel.—A. BRACEWELL.

SHEFFIELD.

Can you tell me anything of the photographic work that can be done in and round Sheffield?—C.A.

Sheffield is more noted for its manufacturing activities than as a beauty spot, but if it does not itself furnish materials for pictures, it is at least near a great deal of very delightful scenery which can be reached from it both quickly and cheaply.

To take a typical camera ramble we may select Wharfedale Crags. The nearest station to these is Oughty Bridge, and the return fare, Great Central, is tenpence. As the train nears Oughty Bridge the hilliness of the district promises well. On reaching the station we cross the line and wend our way through Wharfedale woods uphill towards the Crags, a walk of about two miles. Some splendid trees and bracken subjects are passed on the way up. No charge is made for admission, but every care should be taken to do no damage. At the summit are some old-fashioned cottages, which will not only serve as subjects for the camera, but at which refreshments can be obtained. The rest of the day can well be spent in a ramble amongst the rocks here, and on returning to Sheffield the photographer will feel that he has had at least one good day's enjoyment amongst its surroundings.

There are other places easily accessible from the city by means of the electric trams.

For example, the car may be taken to the Kirth Park terminus, walking thence to Shire Green, where the ancient industry of the hand fork makers may be seen. Further on is Grange Lane.

Further away than the places just named, but readily reached from the city, are on the one hand the beauties of Derbyshire and the Peak, and on the other the Dnkeries.

Photographic materials are readily obtainable. The two most central shops are those of Messrs. Watson in High Street, and the Sheffield Photo Co., in Norfolk Street. Both have dark rooms.—F. GARDNER.



Platinum Toning Bath for P.O.P.

Professor Namias points out that an excellent platinum toning bath for P.O.P. may be made of

Potassium chloroplatinate	15 grains
Distilled water	30 ounces
Pure hydrochloric acid	75 minims
Oxalic acid	150 grains

Spotting Negatives and Prints.

When a number of fine spots are to be taken out either on a negative or print, a fine "mapping" pen will be found a more convenient tool in unaccustomed hands than a brush. Only a very little colour or Indian ink should be put on the pen at first, so little that it requires replenishing after every half dozen spots or so. If not, the spots may be far bigger than they need be.

A Matt Varnish.

A varnish suitable for applying to the glass side of negatives to take pencil and stump work may be made of

Sandarac	½ ounce
Ether	4 ounces
Alcohol	½ drachm

The sandarac is shaken up in the ether until it is quite dissolved, and then the alcohol is added and the varnish filtered through cotton wool.

Intensifying Fogged Negatives.

The intensification of a negative that has been over-exposed is a foggy may thus be carried out: The plate is first soaked for a minute in

Ferric chloride	60 grains
Citric acid	60 grains
Water	2 ounces

It is washed for five minutes and then bleached in

Mercuric chloride	30 grains
Common salt	30 grains
Water	2 ounces

It is next soaked for a minute in a six per cent. solution of common salt, washed, and bleached in

Sodium sulphite	36 grains
Water	2 ounces
Sulphuric acid	20 drops

Finally it receives a good wash. ("Nord-Photographie.")

Encaustic Paste.

The following mixture applied sparingly after mounting to a print or enlargement and well rubbed in enriches the shadows and improves the general effect very considerably.

White wax	1 ounce
Benzol	1 ounce
Oil of spike	1 drachm
Alcohol	1 ounce

The wax should be melted by being put in a jar in warm water, the benzol added, and the mixture stirred well, then the oil and finally the alcohol are stirred in. This must not be made near a fire or other light on account of the inflammability of the benzol vapour.



Sunlight and Shade.

By N. B. Roberts.

FIELDWORK FAILURES.

By T. H. E.

Hints and Cautions.

LANDSCAPE work with a stand camera is quite one of the easiest forms of photography in many respects, but there are little things which may be neglected or overlooked, which will give the photographer much needless bother and perhaps cause disappointment. A

few of these, gathered from my own experiences, may be mentioned, and, being mentioned, the reader will be put on his guard.

One should never unnecessarily expose dark slides, however reliable, to a strong light. Some workers have a neat black bag made for each slide, which not only guards against this, but also protects the finish of a nicely made slide. These bags are supplied by most of the leading dealers, or can be made at home. They need no fastening—merely a flap of the material to fold over. For the same reason, if the slides are not in bags, the camera case should not be left open while focussing, especially if the slides stand upright in it. The top of a dark slide—the end where the shutter draws out—is its weakest place as far as light fog is concerned.

After making an exposure, or after focussing with the idea of making an exposure, it should be made an invariable custom to replace the different adjustments that have been altered. Otherwise, when the next exposure comes to be made, the fact that they have been altered may be forgotten. This applies to stopping down, to putting an orthochromatic screen in or out, to use of the rising or cross front, or to swinging the back. The horizontal swing and the rising front in particular should be looked to. If the lens is well above the centre of the plate, it may easily be overlooked. The result will be that the top of the picture will not be so evenly illuminated as it might have been. The rising front is a valuable movement to have, but it should not be used unnecessarily.

The last thing before exposure, the different screws should be felt and tightened up. This should be made a kind of habit, as if it is omitted the camera will certainly not have all the rigidity it is constructed to have, and the exposure may perhaps be spoilt from movement of some kind.

Even with so simple an operation as the taking off of a lens cap there is a right way and a wrong way. The wrong way is to pull it off much as a cork might be drawn, leaving the whole camera in a state of

tremor when the exposure commences. The right way is to give it a kind of twist when taking it off, almost as if it had to be unscrewed, to hold it for a moment only just touching the lens, and then to take it right away until the exposure is over. I have seen a plate spoiled by the cap being held partly over the lens, quite unconsciously, while the photographer was gazing hard at the subject all the time, to make quite sure it did not move. It is often possible to keep the clouds in a landscape by a trick of exposing with the cap. Instead of taking it right away, it is lifted more or less slowly in front of the lens, and replaced in the same way, so that the bottom of the lens is uncovered for a much longer time than the top. In this way the foreground may be given two or three times the exposure of the sky without any fear of a line of demarcation showing.

When the camera is being used at its greatest extension, or nearly so, if it is an old instrument which racks in and out very easily, it may happen that after focussing has been done the pull of the bellows will draw the lens in again a little, and make the image fuzzy. This can usually be prevented by making a little wedge—a match will often do all that is wanted—and wedging the baseboard. After securing it in this way a second glance should be given to the focussing screen to make sure that the picture is quite sharp.

It is a good habit to get into to look inside the camera after removing the focussing screen and before inserting the dark slide, just to see that all seems to be right.

A possible source of trouble lies in exposing the plates in no definite order. The slide marked 1 should be exposed first, and so on, unless the different slides contain different makes of plate. In any case almost, the lower number—the odd number, that is to say—should be exposed first. This very much lessens the risk of double exposure. It has also this advantage with book form slides, that in every properly made slide of this pattern, when opened, the lower number is the plate which can be taken out without unfastening the division between the two halves of the slide.



Pal-a-Cake.

By S. E. Sheppard.

Certificate, Beginners' Competition, April



Carbon Printing Notes.

By C. G. F. Special to "Photography & Focus."

Suggestions for the guidance of those who are thinking of taking up carbon work. Hints on the selection of the tissue and transfer paper, on avoiding the common faults, so ensuring a successful result with the very first print.

CARBON printing will always appeal to the amateur photographer as one of the best ways of dealing with his best negatives, and as allowing him enough control over his results to make a great improvement in the final effect possible, while not giving so much control as to run him into any danger of being mastered by his process. In gum printing and in oil it will often happen that the process takes charge of the proceedings. The photographer has not got sufficient manual dexterity to enable him to get what he wants, and his final result is not what he desired, but what the process happened to give him. He does not run this risk with carbon, and it is quite easy for him to make a print which will be a faithful replica of his negative.

The process allows him an unlimited range of colours, and almost as unlimited a range of surfaces, as the tissues and the transfer papers on the market number hundreds. Amongst these he can pick and choose to suit himself, and if he sensitises his own tissue—a very easy task—he may buy a stock of varied colours, which will keep quite indefinitely, and can be drawn upon, from time to time, as occasion offers and fancy dictates.

At first, however, it is wise not to wander too far amongst the long range of colours. The different tints require different times for printing, and in the light tints especially the exposure has to be determined very accurately if the print is to look bright and vigorous. Engraving black or warm black and cool sepia are two capital tissues for early work. They are both very easy to use—warm black is certainly the easiest tissue of any—and their colours are agreeable without being too pronounced. There are very few photographic subjects indeed which do not look well in one or other of these tints. Nor need the photographer be afraid of getting a good supply of the insensitive tissue, so as to buy economically.

Whatever colours he may fancy subsequently, black and sepia will be found good and useful stock. They do not differ greatly in rapidity; the sepia requires a little longer printing than the black, but not very much, and if they both are printed for the same actinometer time very little will be found wrong with the result.

Trouble at the early stages of carbon work may also be avoided by a little care in the selection of transfer papers. The photographer will very naturally be anxious to secure some of the broad drawing-like effects which the rougher surfaced papers yield, but he will do well to restrain his

impatience until he has quite mastered the use of the smoother transfer papers. A white Rives paper is a very suitable one for a beginner, and a toned matt paper is another, which is particularly suitable for sepia prints. If the same surface of transfer paper can be got both in thick and thin grade, the thick should be selected for choice, as it is less likely to tear in unaccustomed hands.

Many of the early troubles in carbon work are traceable to the simple operation of soaking the transfer paper before transferring the tissue to it. The published instructions, as a rule, do not attach sufficient importance to this being thorough. It is not possible, in reason, to over-do it: it is very easy to under-do it. The transfer papers just mentioned should be soaked in cold water for at least half an hour before use, and should be examined to make quite sure that they are wetted all over, and that no air-bells are adhering to them. When the thicker and rougher papers are used this time must be increased. With the very rough hand-made drawing papers, a soaking of twelve hours is none too long; but if it is inconvenient for any reason to allow them to soak as long as this, it may be shortened to an hour by using water which is warmed up to about the temperature of the hand. It should not be hotter, or the sizing may suffer, and the picture not be held to its support properly while it is being developed.

Such rough papers are improved by being taken out of the soaking water once or twice, laid upon a clean piece of glass, and rolled gently with a roller squeegee. This helps to expel any air retained amongst the fibres of the paper, where, if it were to remain, it would cause blisters when expanded by the warm developing water.

If a big blister makes its appearance during development, the utmost care will be required if the print is not to be ruined by it. Development must be finished as gently as possible, and the print transferred face upwards to the alum solution. The centre of the blister should

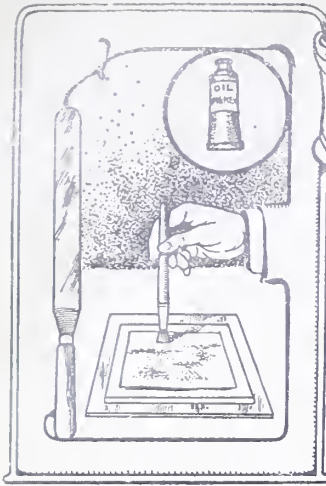


A Kitten Study.

By James Anderson.

then be pricked from the back with a needle, taking care not to pierce the film itself, and after very gentle washing the print may be dried face upwards on blotting paper. Unless it is a large print on which a lot of care has been bestowed, it is almost a waste of time to try to do anything with it, and it is better to tear it up and make another, as unless carefully hand-worked over the blister will always show.

There is one other precaution which every carbon printer should take before making a print. He should make sure that his tissue is soluble, by actual trial in a little warm water.



First Attempts at Oil Printing.

Hints for Beginners who wish to try this Fascinating Process.

By H. Fowler. Special to "Photography and Focus."

SINCE Mr. G. E. H. Rawlins drew attention to the

forgotten process of Poitevin, oil printing,

as it has been termed, has come to the front with great rapidity. Oil prints will figure largely at the exhibitions this winter. Oil is a process which appeals particularly to the lover of "control," to the worker who has a taste for printing and has done a little at it, but lacks the skill to work entirely with the brush. While I like the results that oil printing will yield, I must say that I do not think it will ever be very popular amongst the rank and file of photographers. It is not at all easy to get the result one wants, and it is not easy to get a result similar to a straight print by any other method. As often as not the result is not what was tried for, is patchy, irregular, or weak; but in capable hands something of very different quality may be obtained. We are not all Demachys. But many would at least like to try the process; and it is to help that "many" that, at the request of the editor of *Photography and Focus*, I have written what follows.

Let it be understood at the outset that this does not aim at being a complete treatise, but simply a description of the methods which in my hands have answered best, and which I think it would be well if the would-be oil printer were to follow.

The materials which I employ are got from several different sources. The brushes were the greatest trouble. The demand has led to all sorts of inferior brushes being put on the market; inferior, I mean, in make. Their materials may be of the best, but they moulder; and hairs on an oil print are the occasion of curses deep if not loud; often, I fear, both. So far the best I have come across are contained in a set sold by

Messrs. Miller and Co., of 1, St. Thomas Road, London, N., and known as "the Salon." The set contains a large brush of Lyons hair with an oblique top, two brushes of fitch hair, and a softener, and all are useful in inking up. I have no interest in Messrs. Miller's goods, I need hardly say; but write of them as I have found them. Some of the cheaper brushes on the market can be used, but the task of picking hairs off the print, and of inking up again where the hairs have left their marks is very troublesome. If only one brush is to be used, then one of Messrs. Griffin's may be got, unless Messrs. Miller can be induced to split a set.

There is no great need for a diversity of brushes, as a great deal of control over the effect can be got by mere alteration in the way one brush is held. The real need for several brushes comes from the necessity for using a clean brush at times, and it is inconvenient to have to leave off pigmenting to clean and dry one of the brushes. For this reason it is handy to have three or four, even if they are all alike.

For most of my work I have used Illingworth double transfer paper No. 116, but since the Autotype Co. introduced special papers for the process I have used those. A toned paper supplied by the Autotype Co. for oil printing, used with Roberson's sepia ink, yields a print of a most agreeable colour. Griffin and Roberson's inks have both answered

From an Australian Reader of "Photography and Focus."



A Tranquil Sea.

By W. J. Chapman.

very well in my hands. Griffin's is ready to use at once; Roberson's I have found almost too stiff, and have preferred to add just a trace of Roberson's medium. A palette knife, a piece of glass to act as a palette, a few sheets of blotting paper complete the outfit, except for chemicals which are given in the formula below.

The sensitising of the paper should be done preferably the same day as it is printed, or, at any rate, not more than a day before. My usual plan is to sensitise two or three sheets before breakfast, and if by lunch time I see that I shall want two or three more these are then sensitised and pinned up to dry. The paper should dry in summer time in about an hour and a half. The sensitising liquid may be a plain three per cent. solution of potassium bichromate; but the carbon printing formula first published by Mr. H. W. Bennett in *Photography*, and since so widely copied, will be found to give very clean good results, and is what I always use. It is made by dissolving half an ounce of potassium bichromate in a pint of water, one dram of citric acid in five ounces of water, and mixing these solutions. Strong ammonia is then added until the orange tint of the bichromate changes to a lemon yellow. This solution keeps indefinitely, but should not be poured back into the bottle after use. There is no need to be lavish with it. Enough is poured into a dish to wet the bottom all over, and a piece of the paper is immersed in it. A clean squeegee may be used to carry the liquid over both back and front of the paper, and to remove air bells. As long as the paper is quite limp and there is a little free liquid left in the dish, enough has been poured out. When the first is quite limp a second may be treated in the same way. Each piece should remain in this solution for

at least two minutes. Leaving it in longer makes no difference. The paper is then taken out and pinned up to dry. Sensitising can be done in full daylight, but after pinning the paper up the room must be darkened until it is dry. Drying is helped by taking off the drop at the lower corner of the paper as it accumulates. When the paper is about half dried what has been the top corner may be made the bottom, and it will dry all the sooner.

Printing in this, as in every other photographic process, is an all important stage. Capt. Puyo and M. Demachy recommend the use of an actinometer; but, although I do not wish to pit my own authority

against theirs, I must say that my own preference is to use the negative itself as the actinometer, and to watch the progress of printing by looking at the print itself. Starting as a good orange colour, the action of light turns it to a buff grey, in which all the details of the subject are distinctly visible. Printing is complete when there is just a trace of light action perceptible underneath the most opaque parts of the negative. I have not found it at all difficult to judge the progress of printing in this way, but the suggestion which M. Demachy made to cover the printing frame partly over during printing so as to get examples of under and over-printing as well as an intermediate stage which seemed correct is an excellent one. If the print is then cut in half, and only one half washed and inked up, the final result may then be

compared directly with the appearance of the print as it left the frame, and so a good idea of the correct depth to which to carry printing can be obtained at once.

When the print comes from the frame it must be put to soak in cold water. This should be done at once, as otherwise the image deteriorates. The instructions usually give half an hour as the correct time for soaking, but it is much better to regard an hour as the very minimum; two hours is better. The water may be changed once or twice, and the print must, of course, be kept well below the surface. At the end of the washing the picture will have faded very much in colour, but will have acquired a kind of relief, very visible when it is blotted off.

The next stage is the most interesting one. The print has to be inked up. For this purpose it is laid face upwards on a pad made of half a dozen pieces of blotting paper, which are saturated with

water. A piece of glass forms a good basis for the pad, and the whole arrangement may be stood on end for a couple of minutes (not longer) to drain. Then with a clean, fluffless handkerchief the surface of the print is lightly dabbed until on looking along it edgeways all the surface water is seen to be removed. It is then ready to receive the ink.

The operations may be broken here, as after printing and thorough washing the print may be allowed to dry, and may be inked up at any subsequent time that is convenient, merely soaking it in water for two or three hours before inking.

(To be continued.)



WATER LILIES.

BY EDWARD REYNOLDS.

Awarded the Third Prize in the Special Subject Competition, July.



Exposures with Magnesium Ribbon.

By HORACE MASON. Special to "Photography and Focus."



Cases when it may be used instead of flashlight.



WHILE most amateur photographers have made exposures by the help of flashlight or of magnesium powder, the employment of magnesium ribbon seems to be almost entirely limited to printing on gas-light papers or lantern plates, or perhaps also to enlarging. Yet for many purposes it is quite as suitable as the flashlight, and easier and more economical in use. No flash lamp burns the whole of the

magnesium powder that is blown through it; there is always left a certain quantity, sometimes quite a large proportion, of unburnt magnesium dust. But it is a simple matter to ensure that the whole of the ribbon is burned.

Another advantage which the ribbon possesses over the flashlight is the greater ease with which any exposure may be subdivided, allowing part of the light to come from one direction and part from another. In many cases this power of control, which is very conspicuous when the ribbon is being used, is most valuable.

It is an advantage not to be despised also to get rid of the risks which are inseparable from the use of flash powders, although this is a point which one would not press too far. Still, it is a point, and although plain magnesium powder used in a flash lamp is quite free from all risk of explosion, even a cheap flash lamp costs a certain amount of money, while ribbon can be burned with no more apparatus than a box of matches.

When magnesium ribbon is to be burned, it should be drawn once or twice between the finger and the edge of a



Drifting.

By Frank A. Becken.

pocket knife, first on one side and then on the other, to remove the thin coating of oxide and show the bright metal underneath. This makes it burn much steadier. It should also be cut up into pieces, not more than six or eight inches long, as otherwise the free end may wave about too much while it is burning, and perhaps go out.

The first use which suggests itself is for portraiture; but here it must be confessed that flash powder has the advantage. Still, if no flash powder is at hand, very good portraits may be made with the ribbon. A reflector must be used on the shadow side of the face, and the ribbon must be burnt behind some kind of diffuser. A sheet of tracing cloth as large as convenient may be stretched on a light frame, and hung up a little above the sitter's head and in front of it. It may be necessary to attach a screen of card to one side of the frame to prevent light from the burning ribbon falling direct upon the lens, which would give rise to flare and fog. It is difficult to lay down very definite data as to the quantity of ribbon required, but the writer has succeeded very well with about forty inches of ribbon, burned as directed, using a fast plate and lens at $f/6.7$.

When still life and copying have to be done, the advantages are all in favour of the ribbon over the flash. For flowers and similar subjects, the diffuser just described is a necessity. The lighting should be carefully studied, using a lamp, which must be moved about until the effect which is sought has been attained. The diffuser is then placed where the lamp was, and the exposure made in the usual way. For portraiture, it is best to cut the ribbon into comparatively short lengths and make a kind of torch of it, to diminish the risk of the sitter moving, if the exposure were very prolonged. But with still life there is no such need to hurry, and the ribbon may be burnt in a single piece. The quantity used and its position should always be noted, as then it is possible to repeat any given exposure exactly, or to make any such modification as may seem to be necessary. Carefully burnt, it will be found that a given length of the ribbon will always give the same amount of light.

Copying may also be done very conveniently with magnesium ribbon. In this case no diffuser is required, as a

definite scheme of light and shade, such as is wanted when photographing some solid object, is no longer a desideratum. On the contrary, in order that the paper shall show as little grain as possible, the subject must be lit as nearly as we can manage it from the direction of the lens itself, and as uniformly as possible from top, bottom, and sides. When all is ready, then, the ribbon should be divided into two equal parts. One should be burnt on one side of the lens and one on the other, keeping the burning ribbon moving all the time, and as near to the lens as can be safely managed.

It is quite possible to photograph small interiors by the light

of magnesium ribbon, and in this way a much better photograph can often be got than by using daylight, especially if there are windows to the room which come in the picture. No diffuser is necessary in such a case, but the ribbon must be moved about a little. The quantity of ribbon required will depend largely on the size of the room and the prevailing colour of the walls and of its contents. A large drawing room, in which the walls were very light in colour, was fully exposed with twelve feet of ribbon, using $f/8$ and one of the fastest plates on the market, but this was rather an exceptional case. Still, four or five feet of ribbon will be found ample for most ordinary domestic interiors, as the darker colour of the walls and furniture would no doubt be more than counterbalanced by the smaller size of the room, which would allow the burning ribbon to be much nearer to the objects it had to illuminate.

Magnesium ribbon will also be found a very useful material for supplementing daylight in interiors and similar work. The conditions are so very variable that it is impossible to give any data that

would be of service. A coil of the ribbon should at least find a place in the kit of the stand camera worker, and will often enable him to photograph what otherwise would be impossible. No other apparatus is needed beyond a box of matches. A match may be split, with a knife, and the end of the ribbon inserted, to serve as a holder, as the ribbon gets very hot as the flame approaches it. The two things to remember are to keep the ribbon moving as it burns, and to take care that the light from it does not at any time fall directly on the lens.



"OF THE ORDER OF ST. DOMINIC."

By W. F. HOLDSWORTH.

Awarded a Certificate in the April (Advanced) Competition.



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BY GEORGE W. DUNN.

Imperial Orthochrome Plates

**An added
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in the hands
of the photographer.

They are
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when the reproduction of the beautiful

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is so important a matter in landscape photography.

Unrivalled
in brilliancy,
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OFFICES.—20, Tudor Street, London, E.C. Telegrams: "Cyclist, London." Telephone: 5610 and 5611, Holborn.

PUBLISHING DATE.—*PHOTOGRAPHY AND FOCUS* is on sale throughout the United Kingdom every Tuesday morning.

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GREAT BRITAIN. ABROAD.

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ADVERTISEMENTS.—All communications on advertisement matters should be addressed—The Advertisement Manager, *PHOTOGRAPHY AND FOCUS*, 20, Tudor Street, London, E.C. All copy for displayed advertisements for the issue of any particular week must reach Tudor Street by the post on Monday morning in the week previous.

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BOX NUMBERS.—For the convenience of advertisers, letters may be addressed to numbers at the office of the paper. When this is desired, 2d. will be charged for registration, and three stamped and addressed envelopes must be sent for forwarding replies. Only the number will appear in the advertisement. Replies should be addressed, "No. 000, c/o *PHOTOGRAPHY AND FOCUS*, 20, Tudor Street, London, E.C."

DEPOSIT SYSTEM.—Persons who hesitate to send money to unknown persons may deal in perfect safety by availing themselves of our Deposit System. If the money be deposited with *PHOTOGRAPHY AND FOCUS* both parties are advised of this receipt, and upon intimation of the arrival and acceptance of the goods, the money is for-warded, less a charge of 1/- for registration. The time allowed for a decision after receipt of the goods is three days. For all transactions exceeding £10 in value, a deposit fee of 2s. 6d. is charged. Cheques and money orders should be made payable to the Proprietors, Messrs. Iliffe & Sons Limited, and addressed to them at Coventry.

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ADDRESS.—All communications for the Editor should be addressed: The Editor, *PHOTOGRAPHY AND FOCUS*, 20, Tudor Street, London, E.C.

TO CONTRIBUTORS.—The Editor will be glad to consider original up-to-date manuscripts on photographic subjects. All contributions must be typewritten, or in very legible handwriting, on one side of the paper only, and should bear the name and address of the sender. Letters or communications arising out of matters already appearing in the paper are not paid for. The Editor disclaims legal responsibility for the safety of matter submitted to him, but he will endeavour to return rejected manuscripts, etc., when a stamped addressed envelope is enclosed for that purpose. No notice whatever can be paid to communications without the name and address of the sender, not necessarily for publication.

PRINTS FOR CRITICISM.—Readers sending prints for criticism or advice are notified that in all cases it is understood that by so doing permission is given for their reproduction, without fee, in *PHOTOGRAPHY AND FOCUS*.

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PAYMENTS.—Articles and illustrations are paid for on acceptance.

INTERVIEWS.—The Editor will be at 20, Tudor Street, on Wednesdays, between the hours 11.30 and 12.30 a.m., but can only be seen at other times by appointment.



THE BIRMINGHAM PHOTOGRAPHIC CO., LTD., announce that the "Nonstress" quality of their bromide papers is now extended to the gaslight paper, which will be sold as "Nonstress Celerio."

BULL VERSUS TIGER. A fight between a bull and a tiger was organised at Marseilles in the interest of some kinematographers. During the fight the police forced an entry and arrested a number of persons. We hear that the cameras and kinematographs were badly injured in the struggle.

DEATH OF HENRI BECQUEREL. By the death of Henri Becquerel at the early age of 56, France loses one of her best known physicists. The Becquerel radiations, as the emanations from the uranium salts are termed, were his discovery, and radium itself, although discovered by the Curies, was due to the systematic investigation of invisible radiations which was inaugurated by Becquerel.

Books for . . . Photographers.

Photography for All.

By W. JEROME HARRISON, F.C.S.
Covers the whole ground of photography as practised in its most popular forms.
Cloth Bound 1/- nett. Post free 1/2.

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All the different processes described at first hand by a practical slide maker.
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By W. J. WARREN.
A complete, practical, concise and well written treatise on what is the finest of the printing methods of pure photography, with facsimile developed and undeveloped platinum print.
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Over 300 Formulæ, Hints, etc. Reliable and up-to-date.
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A full list sent on receipt of a postcard,
ILIFFE & SONS LTD.,
20, TUDOR ST., LONDON, E.C.

NO NEGATIVE SHOULD BE INTENSIFIED that has not been thoroughly fixed as well as thoroughly washed, as stains and marks which are quite unremovable will be the certain result.

AFFILIATION OUTING. The following awards have been made for prints taken on the occasion of the Ayot outing: First, C. H. Connolly; second, F. C. Boyes; third, J. C. Fox. Lantern slides, W. Llewellyn White.

QUICK WORK. A correspondent who signs himself "Slocum" writes to the "Daily Express" saying he took 258 negatives on his holidays, and developed the whole lot in one day on his return. He asks, "Is this a record?"

TWO THOUSAND EIGHT HUNDRED APPLICATIONS were received by the Birmingham Photographic Co., Ltd., in reply to their advertisement in *Photography and Focus*, and they are still coming in at the rate of about twenty a day. The applications are being dealt with as quickly as possible.

AN EXTRAORDINARY MISTAKE. According to her "Natal Witness" a Basuto servant thought a revolver was a camera and tried to take the photograph of a friend with it. Pointing the stock towards her friend she pulled the trigger, and shot herself as the result. The wound, although a dangerous one, did not prove fatal.

IS THIS CORRECT? According to "Great Thoughts," "whether a man speak our language, or is of our nation or not, that he is or is not a Christian can always be as clearly perceived as are the lineaments of a countenance with which we are familiar." If this be so, how is it that people frequently get taken in so egregiously by persons professing to be Christians who turn out to be scoundrels?

THE SOUTHERN EXHIBITIONS. The Southampton, Hove, and Portsmouth Societies will hold a series of southern exhibitions for the seventh year in succession this winter. Carriage between the three exhibitions is free, fees are reduced, and one entry form can serve for all three. The dates are Southampton, October 13th-17th; Hove, October 22nd-26th; Portsmouth, Nov. 2nd-11th. Entry forms can be obtained from Mr. S. G. Kimber, Oakdene, Highfield, Southampton.

PHOTOGRAPHY FOR WOMEN. The "Daily News" recently gave some sound advice on this topic. After pointing out that a few women were doing well professionally, it said "the salaries earned by assistants in photography are very low, and an educated woman would hardly be satisfied with the monotonous and relatively ill-paid work of developing and retouching. Better wages are earned by heads of departments, especially head retouchers, but on the whole, unless a woman has sufficient capital to set up for herself, photography is hardly to be recommended."

An Emphatic Recommendation.

250,000 GOERZ LENSES

are giving satisfaction to nearly a quarter of a million Photographers in all parts of the world.

If you are not one of this army of workers and desire to use a better lens than the one at present on your camera, why not follow the example so magnificently set, and have a Goerz?

Write for booklet No. 60, "What can be done with a Goerz Lens," to

C. P. GOERZ OPTICAL WORKS, Ltd.,

1 to 6, HOLBORN CIRCUS, LONDON, E.C.; or

STEREOSCOPIC Co., 106 and 108, Regent St., W.; J. T. CHAPMAN, Ltd., Albert Sq., Manchester; WATSON & Co., 84, High St., Sheffield; PHOTO SUPPLIES, Ltd., 11, Pelham St., Nottingham; and all dealers.

QUESTIONS & REPLIES

REGULATIONS.—(1) Envelopes must be marked "Query," and the "Enquiry Coupon" found elsewhere must be enclosed. (2) The full name and address in addition to a *nom-de-plume* must be given. (3) Only one question on one subject is allowed in each letter. (4) Prints may be sent for criticism, but a separate coupon must be sent with each print, and a stamped addressed envelope (not loose stamps) for their return.

ENTHUSIAST (Raynes Park).—The "Chemical Shelf" is not published in book form.

TOSCANO (Bedford Place).—We should try Messrs. Valentine, of Dundee, who have the postcard business in their hands.

G. N. (Longton).—We are sorry we are unable to classify them. They are all good value, but we have not compared them.

R. W. SMITH (Newcastle).—It keeps indefinitely, and may be used over and over again so long as it is found to be working.

C. BACKHOUSE (Highbury).—"Photogravure," by Herbert Denison, published by Hiffe and Sons, Ltd., 20, Tudor Street, London, E.C.

RED PINE (Amprior, Canada).—"Photo Revue," 118bis, Rue d'Assas, Paris, and "Photographisches Wochenblatt," Bendlerstrasse 13, Berlin, W.

WILLIAM BUTLER (Stamford Hill).—Both are "real photography," and our own preference is for what you call the "daub." What is one man's meat is another man's poison.

F. J. G. MOIST (Ealing).—It is not a case of focal length, but of angle of view. Probably 5in. for quarter-plate and 6in. for 5x4 and postcard size would be most generally useful.

FIX (Dungannon).—Your fault is want of cleanliness. Dirty dishes or dirty fingers are responsible for the marks, which may be caused by many impurities, hypo being the most likely one.

WALTER WILSON (Spalding).—About half price is usually reasonable for such apparatus. We could not be more definite with only a verbal description of it. We know nothing against the design.

L. J. HOWARD (Nailsworth).—A longer focus condenser will probably be required, and the front that carries the objective, if it will not now extend twelve or fourteen inches, would have to be made to do so.

C. C. (Hove).—If you get a magnifying glass of greater power than the portrait attachment, and add it to the lens in the same way, you will be able to copy. You must experiment to find the correct distance for the camera from the object.

W. P. LIGHTBODY (Southwold).—We have no information on the point, and hardly like to worry our contributor on such a matter. The particular make has nothing to do with the results. It is a case of learning to use the plates properly.

H. PINAC (East Finchley).—The best course is to see a doctor. Bathing in warm water, and rubbing with lanoline relieves them; but we do not advise self-treatment. Thanks for the offer, but at present we are not in a position to accept it.

E. J. GREEN (Ingatestone).—"Carbona" paper can be obtained from Messrs. J. J. Griffin and Sons. "Venus" paper was made by the Photographers' Art Paper Co., Ltd., of Thornton Heath, but we have heard nothing of it for a long time.

SMEARS (Crouch End).—We are always reluctant to blame the makers, but in this case we should certainly refer to them if you have any more trouble. We have seen nothing like it before, and cannot associate it in any way with your own manipulations.

NEWIRER (Finchley).—We know nothing against the apparatus named, but you cannot expect anything of any great quality at the price named. It is good value, and will, of course, do good work. More than that we can hardly say. The lens can be unscrewed.

W. J. DICK-CORKE (Maidstone).—For daylight we should use two thicknesses of ruby and one of canary. We should not expect varnishing to make it unsafe; but we cannot say what varnish should be used, as we have had no experience of anything of the kind.

PLANTO (Hove).—Hold the print for a moment before developing in the steam from a kettle, and then develop in the ordinary bath made hot (160° F.), or, if still warmer tones are desired, add to the hot bath a few drops per ounce of a saturated solution of mercuric chloride.

TRELAWN (Leeds).—Yes. The best plan is to place in each heap of powder a piece of very fine iron wire about one-third of an inch long. The two ends of each wire should be united to stout copper wires, so that the whole forms one circuit. A couple of bichromate batteries, giving about four volts, will be sufficient, and on passing the current the iron wires will be heated white hot, and set fire to the powder.

DEVONIAN (Kentish Town).—The following is a single solution pyrocatechin developer

Sodium sulphite (crystals)	5 ounces
Sodium carbonate (crystals)	5 "
Hot water to make	1 pint

When quite cold an ounce of pyrocatechin is dissolved in it. The stock solution requires dilution with ten times its bulk of water. We do not recommend this, as single solution developers containing pyrocatechin keep very badly, and are not at all suitable for bromide or gaslight paper.

HYPO (Ludlow).—We are glad to have been of use. The bath is used cold with P.O.P.

AMATEUR (Sheffield).—There is nothing for it but to measure the stops in the way described in "The Week's Query" last week.

CYGNUS (Bradford).—It gives very good definition, but we have not compared it with the others.

R. CROCKHARD (Clydebank).—Valentine and Sons, Dundee, and Raphael Tuck, Raphael House, Moorfields, E.C., supply them.

W. EDWARDS (Stepney).—As you only say your results are "very unsatisfactory," and do not give us any clue as to the nature of their defects, we cannot advise.

W. P. B. (Hull).—Yes, they sometimes take awards in the Beginners' Competition, but, of course, have no chance in the Advanced Workers', although eligible.

ALTRINCHAM (Altrincham).—Water is the solvent, and the proportions are as many grains to a hundred minims as the percentage figures. We have not forgotten our promise.

B. K. TANDAN (Aminabad).—We answered your question in a leaderette a few weeks ago. If you use the coupon in the last issue to reach you in the ordinary course, your print will be eligible.

PRECEPTOR (Liverpool).—We cannot lay down any hard and fast rule. Our own preference is for cool sepia and warm black for all the subjects you name. We do not care for the more pronounced colours.

BIRT (Lincoln).—We should not alter the proportions of either, but simply increase the time of development, as the negatives are too thin. If not, then, instead of adding more of either, we should reduce the water to one-half.

E. NORRIS (Leyland).—The prints must be kept moving in the hypo bath if the whites are not to be stained. The mere addition of metabisulphite will not prevent it. Thorough rinsing before fixing helps to keep them clean.

P. CLARK (Harrow).—The formula is a good one, and nothing is to be gained by altering the proportions for over or under exposure. It has been shown, beyond all question, that the belief that errors of exposure can be remedied in development is a fallacy.

PERCY C. JONES (Manchester).—Theoretically P.O.P. is not so permanent as bromide; but in practice, in careful hands, we should expect to find little if any difference. You seem to be careful, as your P.O.P. prints have not altered, so you would do well to use it.

PERPLEXED (Soho).—They are undoubtedly apothecaries' weights, but not very accurate. They are quite near enough for photographic purposes. You can get 100 grains by taking a drachm and two scruples, and the ounce in most formulæ by taking eight drachms.

RUSTICS (Warrington).—The negative must be soaked in methylated spirit, and gently rubbed with cotton-wool, changing the spirit once or twice. This is for ordinary (shellac) negative varnish. If a celluloid varnish has been used, acetone must be substituted for the spirit.

VIEWFINDER (Greenwich).—The finder evidently includes a larger angle than the camera, and the two should be made to correspond by blocking up the edges of the finder either with black paint or with narrow strips of black paper, until no more is seen on one than on the other.

C. J. H. (Stockton Brook).—No control can be exercised by altering the proportions of the two; in fact, there is no control practicable in development. We are very glad to hear you found our issue so useful, and have a series of articles in type which we hope will meet your wishes.

INDIAN (Arundel).—It cannot be made in as strong a solution as the one named, and a preservative must be used. One ounce of hydrokinone may be dissolved in twenty ounces of a ten per cent. solution of sodium sulphite; but it is hardly a developer to be recommended, as stale hydrokinone stains negatives very badly.

W. J. DICK-CORKE (Maidstone).—The mirror must be at an angle of 45° with the base of the camera, and with the front of the camera. The lens does not focus an image on the mirror, but on the ground-glass via the mirror. The ground-glass must therefore be the full size of the plate, and the image all over it is sharp at the same time, just as if no mirror were there.

SYDENHAM (Sydenham).—The marks are due to the use of a lens that is insufficiently hooded, and therefore to the reflection of light from the camera bellows on to the plate. The centre being farthest from the bellows is less affected than the edges. A hood can easily be constructed of black velvet and paper, which can be slipped on the lens when required, and which will cure the fault once. Reblacking the inside of the camera will help matters.

A number of replies are unavoidably held over until next week.

SPECIAL 'CRITERION' COMPETITION.

**OVER
50
CASH
PRIZES.**

**SHEER
MERIT**

In this Competition all amateur photographers stand an equal chance, as no picture over half-plate size, or which has won a prize in any competition must be submitted.

is the cause of the enormous sale of Criterion papers. Freely admitted by all to be the standard quality of the world.

6d. Packets of all Dealers.

"CRITERION"

**P.O.P.
ESTONA (Self-Toning)
CELERIO (Gas Light)
"NONSTRESS"
BROMIDE.**

CLOSING DATE SEPTEMBER 30th, 1908.

♣ ♣ RULES. ♣ ♣

1. Each entry must be on "CRITERION" Paper not exceeding $\frac{1}{2}$ -plate size, or Postcards, any grade, or surface, mounted or unmounted.

2. Any number may be submitted, but the outside label from a packet must be sent with each set of six or less sent in.

3. The cards *must* be purchased from a dealer, whose name must be given. If your dealer does not stock—send us a p.c. with his name and address, stating your requirements, and we will forward to him by return of post.

4. Entries must be sent in on or before 30th September, 1908, marked "Competition P," to the Birmingham Photographic Company, Ltd., Stechford Birmingham.

5. No entry forms are required.

6. Entries will be returned as soon as possible (except 1st, 2nd, and 3rd prize pictures) if stamped and addressed wrapper is enclosed (not loose stamps), but responsibility cannot be accepted if any are accidentally lost or mislaid.

7. The Company's decision must be accepted as final.

8. No picture which has previously won a prize in any competition must be submitted.

**First Prize,
£5 5s 0d.**

**Second Prize,
£2 2s. 0d.**

**Third Prize,
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**and
50 Consolation
Prizes of 5/- each.**

The Birmingham PHOTOGRAPHIC COMPANY, LTD., Stechford, near Birmingham.



BEGINNERS' COMPETITION.

Open to all photographers who have never taken an award.

PRIZES.

First Prize.—A signed copy of "The Complete Photographer," a half-guinea work by Mr. Child Bayley, now in its second edition.

Second Prize.—A free subscription to *Photography and Focus* for twelve months.

One or more certificates of honourable mention will also be awarded.

RULES.

(1) Each competitor can send as many prints as he likes, but each print must bear on the back the coupon, published each week, the name and address of the sender, the title of the picture, and no other writing whatsoever.

(2) No print will be eligible that is larger than 5½ in. × 3½ in. (postcard size) or 5 in. × 4 in.

(3) No print must be mounted.

(4) No handwork other than simple spotting is permitted on negative or print, nor shading or dodging of any kind. It is distinctly understood that entry in the competition implies a declaration by the competitor that this rule has been complied with; and in case of dispute, the editor shall have the right to call for the negative from which the entry purports to be a simple direct contact print.

(5) No prints will be returned, and no correspondence with regard to the competition can be undertaken.

(6) The publishers of *Photography and Focus* shall have the right to reproduce, without payment, any of the prints sent in, winning or otherwise. But except the winning prints, the names of competitors of other prints that may be reproduced will not be published without the competitor's consent.

(7) All entries must be addressed "Beginners' Competition," the Editor of *Photography and Focus*, 20, Tudor Street, London, E.C., and must be delivered at that address by the first post on the closing date at the very latest.

CLOSING DATE.—Wednesday, Sept. 30th.

SLIDE COMPETITION.

Full particulars of the annual lantern slide competition, entries for which close on Monday, October 19th, will be found upon page 5, this week.

SPECIAL SUBJECT COMPETITIONS. OPEN TO ALL READERS.

PRIZES.

First Prize.—"Photography" Plaque in Silver.

Second Prize.—"Photography" Plaque in Bronze.

Third Prize.—"Photography" Medal in Bronze.

One or more certificates will also be awarded.

RULES.

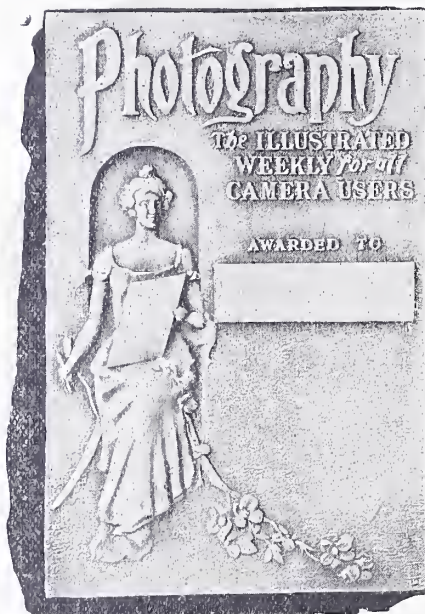
(1) The subject of each photograph entered must be that announced for the particular competition.

(2) Each competitor can send as many prints as he likes, but each print must bear on the back the name and address of the sender, the title of the picture, and no other writing whatsoever. Each print must have attached to it a coupon for the competition of the month, which will be found in each issue of the paper.

(3) No print must be mounted. No handwork other than simple spotting is permitted on negative or print, nor shading or dodging of any kind. It is distinctly understood that entry in the competition implies a declaration by the competitor that this rule has



"Photography" Medal. Actual size.



"Photography" Plaque. Actual size.

Weight in silver over three ounces.

ADVANCED WORKERS' PRINT COMPETITION.

PRIZES.

First.—"Photography" Silver Plaque.

Second.—"Photography" Bronze Plaque.

Third.—"Photography" Bronze Medal.

One or more certificates of honourable mention will also be awarded.

RULES.

(1) All photographs must be sent addressed "Advanced Competition," the Editor of *Photography and Focus*, 20, Tudor Street, London, E.C., postage paid, to reach there not later than the first post on the closing date, and must contain a stamped addressed envelope or label (not loose stamps) if they are to be returned.

(2) Each photograph must be mounted, but not framed. Prints in slip-in mounts are not eligible. Each must bear on the back the name and address of the sender and the title of the picture. No letters or other communications must be enclosed with the prints. Every print must bear attached to its mount a coupon for the competition of the month, which will be found in each issue of the paper.

(3) Each photograph must be the work of the competitor as regards selection and arrangement of the subject, exposure and development of the negative, and printing, development or toning, and mounting of the print.

(4) The prints which are accompanied by stamped envelopes or labels will be criticised by post, and the editor shall have the right to reproduce any of the prints, winning or otherwise. The awards will be made a fortnight after the closing date.

(5) Awards may be increased or withheld at the absolute discretion of the judge, and in all cases of dispute the decision of the editor will be final.

(6) There is no restriction as to the eligibility, except as set forth in these rules, and except that the same negative must not be used more than once in the competition. That is to say, that a print from it once submitted, all further prints, however varied, are ineligible.

(7) Neither editor nor publishers of *Photography and Focus* shall be held in any way responsible for the safety of prints or for their return to the competitors.

(8) The sending of a print to the competition will be regarded as a declaration to the effect that it is eligible under these rules, and that the competitor agrees thereto.

CLOSING DATE.—Wednesday, Sept. 30th.

been complied with; and in case of dispute, the editor shall have the right to call for the original negative from which the entry purports to be a simple direct contact print.

(4) No prints will be returned, and no correspondence with regard to the competition can be undertaken.

(5) The publishers of *Photography and Focus* shall have the right to reproduce, without payment, any of the prints sent in, winning or otherwise. But except the winning prints, the names of the senders of other prints that may be reproduced will not be published without the sender's consent.

(6) All entries must be addressed "Special Subject Competition," the Editor of *Photography and Focus*, 20, Tudor Street, London, E.C., and must be delivered at that address by the first post on the closing date at the very latest.

SUBJECTS AND CLOSING DATES.

A Seaside Scene. Closes Wednesday, September 30th.

A Portrait of a Lady. Closes Saturday, October 31st.

LETO TITLING METHOD.

A simple and practical method of titling prints without destroying or tampering with the negative. **DIRECT WRITING—NO REVERSAL.**

By this method it is possible to reproduce one's signature in ordinary handwriting and printing simultaneously with the negative. The Leto Titling Method can be used also for the production of menus, programmes, and copying sketches, plans, etc., and if printed on Boardoids and plate marked give the appearance of copper plate engravings.



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GUIDE LINES

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for $\frac{1}{2}$ -plate.

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1	$3\frac{3}{4} \times 2\frac{3}{4}$ $4\frac{1}{4} \times 3\frac{1}{4}$	do.	1/-
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2a	$4\frac{1}{2} \times 3\frac{1}{2}$ 5×4	do.	1/6
3	$6 \times 3\frac{3}{4}$ $6\frac{1}{2} \times 4\frac{1}{4}$	do.	2/-



For other sizes, ovals and circles, see full detailed accessory list.

LETO COVER MOUNTS

(WITH TISSUE PROTECTORS)

Form the last word in artistic finishing of Boardoid prints, being effective, simple, and expeditious.

Series No.	Size.	Price.
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2	5×4	1/- "
2a	$6 \times 4\frac{1}{4}$	1/- "
3	$6\frac{1}{2} \times 4\frac{1}{4}$	1/- "



Leto Cover Mounts are made both upright and oblong, in dark art brown. Nos. 1, 2, and 3 are also made in dark art green.

For other sizes see full detailed accessory list.

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In order to better demonstrate the wonderfully artistic possibilities which the Boardoid method of photography offers, special outfits containing all necessary materials, such as plate marker, wide margin mask, cover mounts and Seltone Boardoids, complete with full directions are now obtainable. These outfits give an excellent idea of the process, after which plate markers and cover mounts can be obtained in sizes to suit all requirements.



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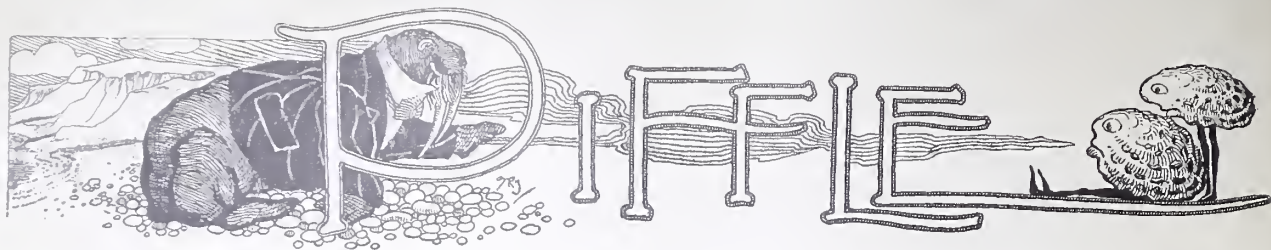
No. 1 for $3\frac{1}{2} \times 2\frac{1}{2}$ or quarter-plate	..	1/-
No. 2 for 5×4 or postcard size	..	1/6
No. 2a for cabinet size	..	2/-
No. 3 for half-plate	..	2/6

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"The time has come, the Walrus said, to talk of many things."

ONE of the most reliable subjects for a photographic journalist to fall back upon when he is hard up for a topic is an account of the different movements of a camera. By the judicious introduction of illustrations and diagrams I reckon I could make an article on this subject that would run as a serial for about ten years. Some of the illustrations would have to be pretty big space fillers, and the majority would be really unnecessary, but I think I could guarantee to write "To be continued in our next" about 499 times before I had exhausted my subject.

* * *

It may be thought that there is nothing left to be said about the movements of a camera. This is quite a mistaken idea. There is. The actual truth about the purpose of some of the movements has never yet been told; and I have resolved to put an end to this conspiracy of silence and throw a new light upon some of the fancy arrangements for which the dealers charge us extra prices. In justice to the dealers, however, it is only fair to say that in some cases they supply cameras provided with movements for which they not only charge nothing at all, but they do not even advertise their existence. For example, large numbers of hand cameras have a movement which consists of a violent jerk at the actual moment of exposure. This prevents pictures being spoiled by excessive sharpness of definition. Other hand cameras are so constructed that a short time after purchase all the component parts move away from each other, thus providing a useful object lesson in the number and appearance of the different pieces, and at the same time affording an opportunity for thoroughly dusting parts that were previously inaccessible. This disintegrating movement also reveals to us the fact that solid mahogany is often whitewood on the inside.

* * *

It is, however, the stand camera that is provided with the greatest possibilities in the way of weird and uncanny movements. Some of the illustrations of cameras as shown in advertisements give an idea of the extent to which these fancy adjustments can be carried. In many cases the things look less like cameras than like designs for pantomime dragons, or nightmare caterpillars suffering from that stabbing pain in the back. The general idea seems to be to provide the purchaser with an exciting pastime by enticing him to make the camera show all its movements and then letting him try to get everything back to its normal condition without breaking anything. The effort to accomplish this is seldom crowned with success.

* * *

One of the commonest movements of a camera is the rising front, and the usual yarn spun about it is that its purpose is to cut something off from the bottom of the picture and add it to the top, just as the Irishman did with his short blanket. But the real effect of most rising fronts is that when raised sufficiently they admit light under the bottom of the lens panel, and thus teach us the effect upon a plate of light that has reached it direct without the customary formality of passing through the lens. The rising front also enables us to secure at will dark corners to our prints, from which we learn that there is a limit to the covering power of a lens. It follows that the front that will rise will also fall. This it does of its own accord. It falls right out; but curiously enough it only performs this evolution when there is something hard for the lens to fall on, so that it is thoroughly and effectively smashed beyond hope of redemption. When a front is so made that it cannot possibly fall out even when it sees a good opportunity, it becomes very angry, and is then known as a cross front. The swing front is designed for the promotion of bad language, and the prevention of even definition over the plate. Let us hope that the man who invented it was swung himself. He deserved it.

The wide-angle movement to a camera is for the purpose of assuring the cutting off of large chunks of the picture by means of the bellows. The swing hack is only an excuse for adding to the cost of a camera and providing work for brass finishers. Side swing to the hack is the outcome of mental aberration on the part of an early Victorian workman in the camera trade. He is deservedly dead. A hack is made to reverse so that it fits worse in the vertical position than the horizontal; and *vice versa*.

* * *

Double and triple extensions are very useful. Nobody knows why, but they are. If the extension is sufficiently long the camera will vibrate and wobble to such an extent that it is quite impossible to secure a sharp image, but everything appears about forty times. This is equivalent to taking about forty pictures on one plate. The bellows on long extension cameras are made with extra strong pulling powers so that the front is curled right over till the lens looks through the focussing screen. The appearance of the camera is then very amusing and well worth the extra cost. Beginners who do not know better are led to believe that with a long extension they should use only a single combination of the lens. They thus have far better opportunities than they would otherwise enjoy of losing one-half of their lens.

* * *

An interesting but little advertised movement of a stand camera is one that generally takes place when dealing with architectural subjects. The tripod being duly spread out on a smooth stone floor, and the exposure being commenced, the said movement comes suddenly into play. The tripod points slip in different directions, making eccentric but well-marked trenches in the floor, and the camera sits violently down. This movement is very effective. It is considered in the best photographic circles to be very bad form to leave the pieces on the floor. They should be carefully swept up, taking particular care that no minute particles of lens glass or tiny splinters of woodwork be left. Someone in a more devout frame of mind than the photographer might kneel on them and be betrayed into momentarily forgetting himself.

* * *

Another camera movement very interesting to observe in the case of another person's apparatus is the convoluted track of the outfit as it makes its way from the summit of a windy cliff to the rocks below. This movement will sometimes provide the economical owner with one or two still serviceable brass screws that may come in useful some day when he gets another camera.

* * *

I know there are many photographers who do not in the least understand what some of the movements of their cameras are for, and I can only hope that these few notes may be of some assistance to them. But if they are not I really don't care much.

THE WALRUS.

SUBSCRIPTIONS.

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PHOTOGRAPHY

A JOURNAL FOR EVERY CAMERA USER.

EDITED BY R. CHILD BAYLEY.

PUBLISHED WEEKLY.

SEPTEMBER 22ND, 1908. TUESDAY. No. 1,037. VOL. XXVI.



THE MILL POOL.

BY T. C. BEYNON.

Awarded the Certificate in the Advanced Workers Competition, July, 1908.



SPIRIT of the TIMES

The R.P.S. Exhibition.

On another page this week we give a review of the exhibition of the Royal Photographic Society, which is now open to the public. On Wednesday last the private view and opening soirée were held. We go to press too soon to furnish any account of those functions, but at the moment of writing there is every prospect of the attendance being as large and representative as ever. Certainly there are many photographers in town who have come for the express purpose of being present at what is the great photographic reunion of the year. They will find a most attractive exhibition awaiting them. Possibly owing to the active part taken by the president in pictorial photography, that section this year is more than ordinarily strong, and is, in fact, the only representative collection of the more sober and orthodox work since the Salon has been so drastically modernised. Nor are the other parts of the exhibition less interesting in their way, the scientific section in particular containing a great many photographs of the most widely different subjects, but almost all in their way important.

We trust that the financial result of the exhibition will be equally satisfactory. It may be too much to hope to repeat the record takings of last year, when the Autochrome section, organised by Mr. T. K. Grant and the editor of *Photography*, proved such a powerful attraction, but at least we trust that the number of those who pass the turnstiles will not be very much smaller.

Lenses on Leaves.

One of the most curious of the facts which were brought up at the meeting of the British Association this year was that which Professor Wager communicated to the Botanical Section. He described how the outer coating of many kinds of leaves was actually so constructed as to form lenses, which brought the light falling upon it to a focus in the interior of the tissue; and to show how effectively this was done he produced a

number of photographs which had been obtained by means of these vegetable lenses. The exact purpose served by these lenses is still unknown. It has been surmised that inasmuch as the nourishment of the plant depends upon the stimulation of the chlorophyll in the leaves by means of light, these lenses may be so arranged as to condense the light upon the chlorophyll; and in this view the observation that, although the convex formations are found upon all leaves, they are most in evidence on plants grown in the shade becomes important. Haberlundt's theory is that they may be part of the apparatus by which a plant turns its leaves so that they receive the maximum amount of light—in fact, its eyes—the lenses corresponding to the cells of which the compound eyes of insects are built up. It may seem startling to learn that plants can have eyes, and in the sense of a complete optical system for projecting images on a sensitive surface they have not; but there can be no doubt that a plant's movements depend upon the direction of the light which falls upon it, so that some form of perception would seem to exist.



MEMORANDA for the week

In this space we announce, as occasion arises, things which in our readers' interest they would do well to note.

The Franco-British Exhibition.

During the past week the exhibits at the Franco-British Exhibition have been judged by the various juries appointed for the purpose. In the photographic section the British representatives on the jury who acted were Mr. George Davison, who was elected vice-chairman, and Mr. Child Bayley, the editor of *Photography*. The photographic exhibits were far more numerous than, owing to their scattered nature, they seemed to be, and the actual judging occupied two full days and a half. M. Paul Nadar, of Paris, acted as chairman, and M. Charles Gerschel, of Paris, was one of the honorary secretaries, the other being Mr. Child Bayley. It was pleasant to note the extreme cordiality and hearty good feeling which characterised the proceedings, and the unfeigned admiration of our French colleagues for the British pictorial exhibit. The arrangements for the French section were a triumph of organisation, which was all the more noticeable when contrasted with the happy-go-lucky way in which the British photographic exhibits and arrangements generally were left to chance. The list of the awards in the photographic section will be made public shortly.

Photographing Trees.

So many amateurs take up landscape work as their side of the hobby that everything which deals with the subject is of interest. Especially so is an article in the current "County Gentleman," signed "Orexis," in which that writer points out how difficult is tree photography on account of the infinite number of small forms and tiny points of light and dark that the trees contain. Yet, as he says, some sort of generalisation and massing must be attained. Yet it is no use massing everything, or the characteristic qualities of lightness and featheriness may be lost. It was Corot who said that his foliage should look as if birds could fly through it. Trees in full summer foliage are most imposing in mass, but they are never *flat* masses; there is always a sense of roundness, and of part coming towards the eye, as well as the greyer light from the sky upon the top, and catching all horizontal projections. All this drawing and modelling within the mass is lost if trees are represented as shapes cut out of cardboard. Every painter knows how important it is to lose the edges, and find them again when wanted for emphasis. This dignity of mass is chiefly to be sought for in middle-distance. It is in the foreground that lightness is seen to advantage, and there, of course, only a branch or two can be dealt with. A spray of foliage near enough for the shapes of the leaves to be made out will not only be graceful and delightful in itself, but it can by contrast certainly add dignity to the mass behind. Another caution which he gives is against the repetition of the forms of the trees in the cloud forms.

One of the causes for the lifelessness of many tree pictures is under-exposure, with, as a result, insufficient detail in the masses. Lack of orthochromatism is a more common one, as the deep green of the tree is one of the colours to which an ordinary plate is least sensitive. Even if an orthochromatic plate is employed, a colour screen is usually a necessity.



NATURE'S MOODS.

His outfit on his back, he walked along with easy swing;
Alert, he gazed all round about, for pictures chance
might bring;
His watchful eyes espied a view, by sunlight gently
kissed;
A fairy scene, enshrouded in a lovely golden mist.

A plate or two on this exposed, he boldly onward strode,
When round a bend there came in sight a broken piece
of road;
"It only wants some puddles there, to break it up some
more"—
He'd hardly spoken, when the rain torrentially did
pour.

He made exposures here, and very soon it ceased to rain,
So, plodding on he came across a field of standing
grain;
"If only that were rippling; what a play of light and
shade!"
A breeze sprang up; the corn bent low; his wishes were
obeyed.

A little later on an icy wind began to blow,
And soon he had to shelter from a heavy fall of snow;
The white clad scenes delighted him, and so he "took"
a few;
The weather cleared, and then he got a lovely sunset
view.

Returning home, he heard a loud, reverberating crash,
And in the storm which followed, "took" a splendid
lightning flash;
"This man possessed Aladdin's lamp, a fairy tale,"
you say!
No, these were but vagaries of an English summer's
day.

The Week's Meetings.

MONDAY, SEPTEMBER 21ST.

Southampton C.C. "Photography as an Educational Force." F. G. Ryder
Bradford P.S. Lecturette.
Walthamstow P.S. Ten Minutes' Papers.
South London P.S. "Tour in Holland." Stanley Fincham.

TUESDAY, SEPTEMBER 22ND.

Wallington C.C. "Micro Photography." W. H. Merrett.
Paisley Philosophical Institution. Policies.
Nelson P.S. "Lancashire Witches of Pendle Forest." F. C. Long.
Nelson C.C. Musical Evening and Slides.
Darlington C.C. Outing Prints.
Blackburn & D.C.C. Fishermen v. Photographers. J. P. Howe.
Manchester A.P.S. Discussion on One-man Show.

WEDNESDAY, SEPTEMBER 23RD.

Leeds C.C. Lecturettes.
Bolton A.P.S. Summerseat.
N. Middlesex P.S. "Landscape in Painting and Photography." H. Mummery

THURSDAY, SEPTEMBER 24TH.

N. W. London P.S. Mounting Methods.
L. & P. P.A. Velox. W. F. Slater.

THURSDAY, SEPTEMBER 24TH (continued.)

Handsworth P.S. Exhibition.
Liverpool A.P.A. The Gorges of the Ardèche. G. E. Thompson.

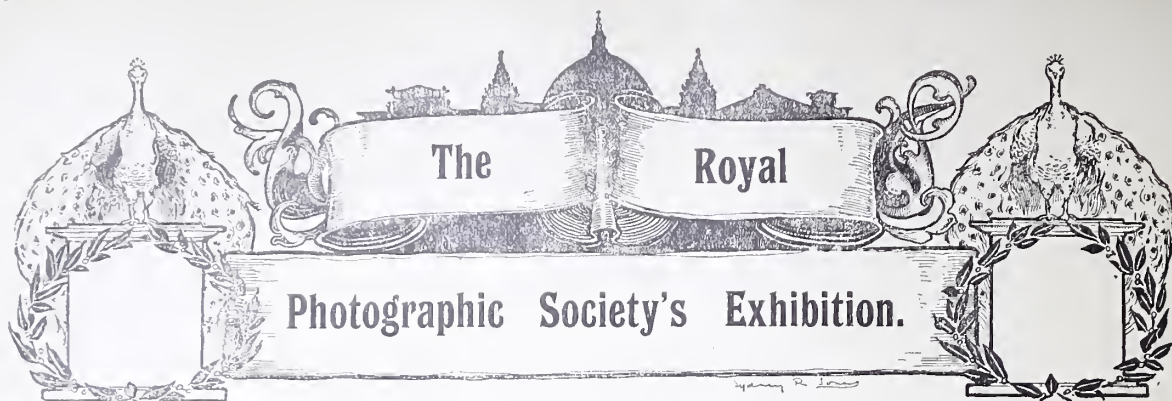
SATURDAY, SEPTEMBER 26TH.

Preston C.C. Nicky Nook.
Liverpool A.P.A. Erbstock.
Paisley Philosophical Institution. Glasgow Harbour.
Bristol P.C. Bristol Docks.
Coventry P.C. Radford and Allesley.
Walthamstow P.S. Wanstead Park.
South Suburban P.S. Chaldon and Upper Warlingham.
Cripplegate P.S. Wheatthampstead.
South London P.S. Broxbourne.
Photo. Art Club (Aberdeen). Black's Dam.
North Middlesex P.S. Chingford.
Woodford P.S. Chingford.
U. Stereoscopic S. General Meeting.
Horwich I.A.P.S. Bidston Woods.

MONDAY, SEPTEMBER 28TH.

Glasgow Southern P.A. Ardul.
Bournville & D.P.S. Criticism Evening.
Bedford C.C. Gaslight Printing.
Waltham A.P.S. Members' Competition.

Societies will have their meetings announced here if the syllabus is sent to us at the beginning of the Session, or from time to time.



THE fifty-third annual exhibition of the Royal Photographic Society is now open to the public, daily from 10 till 6 o'clock, and from 7 to 10 o'clock every evening, at the New Gallery, Regent Street, London, W. On Tuesday, Thursday, and Saturday evenings, at 8, lantern lectures will be given, and on Monday, Wednesday, and Friday evenings, at 7.30, there will be a lantern lecture, illustrated with Autochrome slides, by Mr. J. McIntosh. The exhibition will close on Saturday, October 24th.

THE PICTORIAL SECTION.

Although there are professional, scientific, and trade sections, the pictorial work, which occupies the place of honour in the West Room, always claims the lion's share of attention. The work on view this year justifies it, although there is no single picture or group of pictures which stands out in any marked way beyond the rest. The hanging has been done with much care and with a good eye to the general effect, while at the same time there is no work so hung that it cannot be comfortably seen. Some mysterious strips of brown paper on the walls aroused comment at the press view, but no intimation of their purpose or meaning was forthcoming. The light brown-buff tone of the wall covering harmonised admirably with most of the pictures.

Immediately on entering the Gallery the visitor will note a most effective portrait of our contributor, Mr. W. L. F. Wastell (2), by J. Smith. Mr. Wastell seems a trifle more thoughtful than his wont, but the pose is characteristic and the picture most lifelike. Near it hang two of Count von Gloeden's figure studies, and a large picture, "Sunlight and a Brittany Onion Lad" (11), by W. Thomas. In this corner of the room will be found a strikingly beautiful sunset picture (16) by Louis Teisseire; "The Old Squire" (21), by C. Friend Smith; and "In Old Cahors" (18), by James A. Sinclair—an exhibitor who won his spurs at the R.P.S., and whom the oil process has once more lured forth. Most of his work here shows a tendency towards hardness, which is not always desirable; but in the case of "Dust and Sunshine, Madrid" (227), a brilliant effect has been secured in a most masterly manner. "Winter Showers" (43), by S. E. Wall, is a striking composition, strongly suggestive of Mummery. The President of the Royal Photographic Society this year seems hardly up to his high level. Only two pictures by him are on view—"Waterside, Chesham" (66), and "A Sunny Road" (218). Nothing Mr. Mummery does can be commonplace, but neither of these approaches some of his earlier work, and both suffer from the way in which they are mounted.

On the main wall there is much which deserves very careful study on the part of the visitor. A very misty impression of the Tower Bridge (85), by James C. Batkin, and a bold effect of sunlight and shade, entitled "The Mill, Ypres" (86), by James Gale, hang close beside each other. Miss Hilda Stevenson has a portrait study in oil (92); C. F. Inston "A Glimpse of Dovedale" (90); and Mrs. Barton "Mariana"—a pleasant portrait in a low key. We cannot mention Mrs. Barton's work without referring back to "Morning" (54)—a very difficult subject admirably treated. An exhibitor who

has several good things in this gallery is A. H. Blake, M.A., but most photographers, we fancy, will regard "The Fountain, Kensington Gardens" (94), as quite the best of them. Charming as are many of Mr. Blake's London pictures, we know of none which we prefer to this record of the play of sunlight on the water. Cavendish Morton is another exhibitor who contributes largely to the attractiveness of the Gallery. His "Portrait of a Lady" (103) is very delicate and pleasant, while "Girl's Head" (166) is equally attractive, although much stronger in its contrasts. "The Groot Kerke, Veere" (132), is the picture by F. J. Mortimer which we prefer, and curiously enough not very far from it hangs another rendering of the same building (147) by W. Rawlings, which is far from being so effective. The large "Spring Pastoral" (148), by Charles F. Stuart, is very fresh, airy, and agreeable—an excellent piece of photography, although if anything the trees are a trifle dark in tone for spring foliage. "Winter from Calton Hill, Edinburgh" (151), by J. B. Johnston, is a poetic rendering of Auld Reekie, which certainly deserved its nickname when this photograph was taken.

At the top of the room will be found "The Convent Well" (200), the best of the four oil prints by which John H. Gear is represented. John Moffat's portrait of MacWhirter, R.A. (205), is interesting from its subject, but a little woollier in treatment than we quite like. Allen Lonsdale is amongst the many photographers who secured a striking picture of the "Mauretania" leaving the Tyne, and in No. 207 has utilised the opportunity to the full. "Sun and Mist," by A. E. King (234), strikes us as being a little weak, but the mist effect has certainly been well rendered. Not so truthfully has it been caught, however, as in "Autumn Fog" (260), by Heinrich Hinz. "The Paddler" (261), which hangs just below the latter, is the only picture here this year by Percy G. R. Wright, and is simple to a degree, but not without effectiveness.

The outstanding feature of the wall between the two doors is a group of pictures in colour. No information as to the methods by which the different exhibitors have secured their effects is given in the catalogue, but the presumption is that in most cases they are two or three-colour gum-bichromate. An exception to this is to be found in Mr. Arthur Marshall's pictures, which are described as "coloured oil." We cannot bring ourselves to admit that any of this coloured work has more than a technical interest, and even then it can hardly be contended that that technical interest is photographic. There is no getting away from the consciousness that these things are coloured photographs, and not photographs in colours, and the result in no case seems to justify the trouble that has been expended upon it.

There are many pictures in the Gallery which want of space compels us to pass over unnoticed, and the absence of any mention here must not be taken as suggesting that the work does not deserve it. We have merely picked out a few of the salient features of an exhibition which contains a great many more of notable pictorial quality.

THE SCIENTIFIC AND TECHNICAL SECTION.

The Balcony contains, as heretofore, the examples of scientific and technical photography, and its application to processes of reproduction. Natural History, as always, is

well to the front. "The Stoat" (311) and "The Mole" (312), by Douglas English, are amongst the best of his work that we have seen. Birds are ever popular subjects, and amongst the dozens of bird photographs in this section, it is difficult to select any for mention without seeming unjust to others. "The Song Thrush" (323), by William Farren, is a fine example of painstaking and clever photography, a nest being photographed repeatedly for a little more than a week to show the rapid growth of the young birds and the attitudes assumed by them and by their parents. The comparative pictures of a mesmerised bull-dog and the same beast with all its wits about him (336 and 337), by J. Gray Duncanson, are distinctly curious, while Dr. Francis Ward has been very successful in his rendering of living fish. Photomicrographs of various subjects testify to the skill of W. F. Cooper, F. Martin Duncan, and Dr. Rodman, and A. E. Smith kindly employs his microscope and camera to show us what genuine mushroom ketchup should look like. In this section there are several very beautiful flower pictures, which might well have been hung in the pictorial section. We might mention Miss Marillier's "Single Pæonies" (381) and E. Seymour's "Pelargoniums" (385). The same remark applies to "The Foaming Torrent" (409) shown here as a photogravure by the Swan Electric Engraving Co., Ltd., but a most effective picture by Donald Cameron Swan.

Those who are interested in the immense work now going on at Panama will find Dr. Vaughan Cornish's pictures of the Canal (393-402) most informing as to the nature of the engineering problems, and the way in which they are being dealt with. The thunderstorms this summer have furnished J. Howden Wilkie with subjects, and in one at least the duplication of the flash has been well shown by means of a moving camera. Professor Reiss has an exhibit here illustrating the use of the camera in the detection of forgeries.

At the other end of the Balcony is a small collection of three-colour work, but there is little of a noteworthy kind to be found within it. One exhibit, which is distinctly novel, is the solar spectrum on "Uto" paper (431), shown by Charles P. Butler. This was taken direct in the camera on July 12th, 1907, "since when no perceptible degradation of the colour tints is to be noticed. The print is not fixed, so that it gives some measure of the permanency of the dyes used." Certainly, the rendering is a remarkably truthful one. There are a number of Pinatypes here by Meister, Lucius, and Bruning.

The rest of the Balcony is occupied by a selection from the collection of portraits of eminent British subjects, which the Society is forming. They are contributed almost entirely by F. Hollyer and G. E. Whitfield, and possess great interest quite apart from that which they have as excellent examples of portraiture.

THE THORNTON-PICKARD COMPETITION, in which there are cash prizes amounting to £100, closes on October 1st, 1908. The rules and conditions can be obtained from any dealer, or direct from the Thornton-Pickard Manufacturing Co., Ltd., of Altrincham, Cheshire.

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FORMALIN should never be added to a developer with the idea of hardening the film and preventing frilling. It at once decomposes the sulphite forming a caustic alkali which may not only increase the vigour of the developer so much as to bring on fog, but also actually increases its tendency to frill. This is well shown by adding formalin to the ordinary "No. 1" solution of a developer, which will then develop a plate without the addition of any "No. 2" at all. If formalin is necessary it should be added before or after the development, following the application with washing.

REMOVING STOPPERS. A lady reader writes, "With reference to the difficulty of removing glass stoppers from bottles, this suggestion may be of use. I have a bottle of stock solution of sodium sulphide, of which the stopper used to stick so badly that I always had to call in the help of the servant, who removed it with a pair of nippers—at the imminent risk of smashing it. The last time this occurred I anointed the stopper all round with vaseline, also the inside of the neck. The bottle was then put away for some time, so that it had ample opportunity to get stuck again, but when I took it out the other day I found the stopper come out quite easily, nor does the vaseline appear to have the least effect on the contents of the bottle. Being an oily substance, I suppose the solution passes over it without mixing with it at all." For most of the chemicals that are used in photography, such a proceeding would be found all that is necessary.

THE PROFESSIONAL AND TRADE SECTIONS.

The South Room is occupied chiefly by an admirable collection of enlargements in various styles, which have been executed throughout, including the mounting and framing, by Messrs. Raines and Co. from negatives by Herbert G. Ponting, F.R.G.S., and by three "one-man shows" provided by Furley Lewis, H. Walter Barnett, and William Crooke. Everyone who takes any interest in photographic portraiture will find these three collections by acknowledged masters worth the most careful study.

In the North Room are exhibits by a number of trading firms, including the Autotype Co., the Leto Co., Kodak, Ltd., and the Paget Prize Plate Co. Here, also, are the Autochromes, which are shown by reflected light. These, which are over 150 in number, while not bearing comparison with those at the Salon for pictorial merit, go a long way to show the wonderful power of colour rendering which the plate puts in the hands of photographers.

The lantern slides are not very numerous this year, and until we have had an opportunity of seeing them on the screen we withhold any comment. In the lantern stand some of them look very effective.

The Fountain Court is occupied, as on previous occasions, by representative exhibits from the leading manufacturing firms. Here are to be seen examples of the well-known products of Wellington and Ward, J. H. Dallmeyer, Ltd., Wratten and Wainwright, Burroughs, Wellcome, and Co., O. Sichel and Co., W. Watson and Sons, C. P. Goerz, Ilford, Ltd., etc., while Kodak, Ltd., both here and in the North Room, have a varied and well displayed exhibit.

LECTURE ARRANGEMENTS.

Tuesday, September 22nd—"The Romance of the London Streets," A. H. Blake. Thursday, September 24th—"Elba as it was and is," Rev. T. T. Norgate. Saturday, September 26th—"Afar in the Fatherland," W. L. F. Wastell. Tuesday, September 29th—"Wanderings in Zooland," F. Martin-Duncan. Thursday, October 1st—"Savage Architecture in British New Guinea," A. H. Dunning. Saturday, October 3rd—"Some Glimpses of the Green Isle and its People," C. H. Oakden. Tuesday, October 6th—"Wild Birds and their Ways," W. Bickerton. Thursday, October 8th—"The Gorges of the River Ardèche," G. E. Thompson. Saturday, October 10th—"Southwell Minster," E. W. Harvey Piper. Tuesday, October 13th—"A British Touring Ground," Arthur Marshall. Thursday, October 15th—"Picturesque India," Ernest R. Ashton. Saturday, October 17th—"Some English and French Gothic Churches," Henry W. Bennett. Tuesday, October 20th—"Flower Photography," E. Seymour. Thursday, October 22nd—"Life and Work on the Panama Canal in 1908," Vaughan Cornish. Saturday, October 24th—"The Camera and the Sea," F. J. Mortimer.

THE PHOTOGRAPHIC EXHIBITION at Posen, held under the auspices of the Deutschen Photographen Vereins, has issued a well-illustrated catalogue.

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VOTES FOR DARKROOMS. At the revision of voters' lists at Gloucester, we gather from the "Birmingham Daily Post," votes were claimed by an insurance agent and by a post office clerk—the former occupied a darkroom at his father's business premises, and the latter one above the registration agent's offices. Both claimants were amateur photographers, who asserted that they got their living partly out of their hobby by taking groups, etc. The objection was raised that the premises were not occupied for the purpose of any trade, business, or profession. The Revising Barrister ruled upon the facts that the rooms in question were not occupied for the purpose of a trade, business, or profession, and disallowed the claims.

Concerning

BY C. FENNING-CARTER.

Child Studies.

Special to "Photography and Focus."

EVERY amateur photographer tries his hand at photographing children at one time or another. Charming little models they may make, as the walls of every photographic exhibition will bear witness. Disappointing failures their portraits often turn out, as most of our waste paper baskets or discarded negatives will testify. There is just one consolation which the photographer often has for his failures, and that is that, more often than not, they are due to other people. Who has not stood, with one hand on the lens cap waiting to expose, while some well-meaning mother, after brushing and combing and generally tittivating a child up to the very summit of discomfort, proceeds to pull it or push it or order it to assume some attitude or expression which is thought to be the thing? There is only one way with photographs taken under circumstances such as these, and that is never to print them.

To make pictures of children a non-photographic grown-up person is just as much a superfluity as a man-eating tiger would be. The photographer must have his little model or models to himself, and he must win their confidence long before he thinks of putting his dark slide in the camera. This is as good as saying that it is not every photographer who can take children at all. It certainly is not. There are plenty of people in whose presence children are invariably stiff and unhappy. Such people never get the confidence of the little ones, and had better take up photomicrography or the photography of ancient monuments. Child pictures are not for them. But for those others, who take to the children, and to whom the children take, there is a delightful field of picture-making which opens out.

First and foremost there is the question of clothing. Many a photographer handicaps himself from the start by having his models dressed to a large extent in white. Very beautiful work can be done with the play of light and shade on a white dress, but it is very difficult—one of the very hardest things in portraiture—and the beginner should certainly not attempt it. If light garments are wanted, it is a capital plan to tone them down with strong coffee. This does not make them photograph very



dark, but it keeps their tone down, so that it does not compete too much with the complexion of the child. Have we not all seen attempts which render the delicate flesh tints almost like those of a mulatto right against the hard cutting white of a pinafore? Let the clothes, then, be on the dark side rather than on the light. Moreover, on no account must they be "the best things." It may mean a struggle against the opinions of mamma; but the photographer must face it, and face it determined to win. It may be looked upon as a certainty that the best result is going to be got when the model is wearing the garments in which he or she feels most comfortable. And those are never—or hardly ever—the clothes of state, but may be the very dregs of the wardrobe.

Accessories are often dangers. It is so easy to overdo them, and to make it a picture of the accessories with a child as the background. Charming pictures can often be got with the aid of toys; but they need patience. A child is not a good actor, and if a picture of one playing with a toy is to be made, that child has got to be taken playing with the toy, and not pretending to play. Patience is wanted here—

patience to wait, ready to expose, until the camera is forgotten and the play becomes all-absorbing. It is best to have the toy a simple one, for obvious reasons. A box of bricks, an engine or boat, a doll, have all been successfully used in this way.

Many of the best pictures of children are made on the floor. The floor to most little people is like the table is to us. They feel at home when whatever they are doing is being done at ground level, and there is a naturalness in their pose which would be lost at once if they were set on a high chair and left to play at the table. In such a case, as the floor is the thing, the photographer must go to the floor. His camera should be lowered to within a couple of feet of it, and the front dropped as far as it will go. It is much better to do this than to have the camera itself lower down, as the perspective is better. In fact, provided the picture can be got on the plate without tilting the camera downwards, the higher it is the better, as the suggestion that the child is actually playing on the floor, and is seen from a height above it, is more naturally conveyed.

The deliberate posing of children is a very difficult thing. Now and then one



"RAIN, RAIN, GO AWAY."

By R. GAFFNEY.

Awarded First Prize in the Beginners' Competition for June.

comes across a little model that can enter into the spirit of the thing, and is flexible in the hands of the photographer. Such children are generally girls, and of the mature age of ten or twelve; younger ones are rarely able to do what is wanted. It is better in such a case to abandon any definite plan, and to leave the child alone as much as possible, merely taking advantage of such opportunities as may arise. By keeping ready, it is possible that arrangements may be seized at the moment, which will be better than any pre-arranged pose would be.

Whether the work is to be done indoors or out must depend largely on the conditions; but the photographer should make up his mind that if it is to be done out of doors the subject must be an out of doors one. It is no good him putting a bit of carpet down on the lawn, hanging a background behind it, and trying to make believe it is a room. Rooms do not have transparent walls and ceilings, and whatever the garden lighting may look like, it will not look like an indoor effect. Of course, the temptation to work out of doors, where exposures can be so much shorter, is a tempting one; and there is no reason why one should not yield to it, provided the subject is in keeping with it. There are plenty of outdoor themes from which to choose. Direct sunshine need not be

avoided, although it certainly adds to the difficulties; but very delightful effects can often be got with it—remembering always to expose for the shadows, and on no account to over-develop.

Indoors, the fullest aperture of the lens and the fastest plates must be used. It is best to get as far away from the model as the dimensions of the room will allow, trusting to enlarging, if the original picture is too small without it. This will greatly increase the chances of getting a sharp image, and will often allow the focussing to be done to scale or beforehand, so that there is nothing to do but to put a plate in readiness and await the moment for exposing. The ordinary shutter on the camera is of no use for this work. If it is of the "Unicum" pattern, and is set to "time," the click of opening it may cause a movement on the part of the model which will spoil everything. A "studio shutter" inside the camera is the best, working quite silently and unobserved; but this is a luxury, and the lens cap will be what most will use. Instantaneous exposures are quite out of the question, but in a very well-lit room, with $f/8$ and the fastest plate, one or two seconds will often be found to be sufficient. To keep the exposure down as short as possible, the window should not be curtained in any way, and the glass should be freshly cleaned.



There it is.

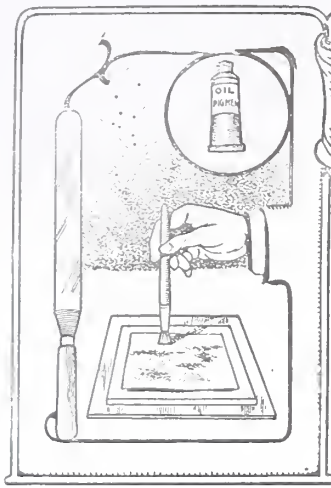
By G. A. Tomkins.



ON THE TRYWERN, BALA.

Awarded the Silver Plaque in the Special Subject Competition for June.

By R. CLARKE.



First Attempts at Oil Printing.

Hints for Beginners who wish to try this Fascinating Process.

(Continued from page 388.)

By H. Fowler. Special to 'Photography and Focus.'

FOR a half-plate print a little piece of ink not

so large as a caper will

be quite sufficient. It is put on the piece of glass which serves as a palette, and spread with the palette knife into a thin layer. The brush is then lightly dabbed on it once or twice, and then dabbed on a clean part of the glass two or three times. It should only just leave a mark, visible if we have a piece of white paper under the palette. The great danger which the beginner incurs is that of undue haste, leading him to take too much ink on the brush and to endeavour to ink up his result too quickly. If the brush is allowed to fall gently once or twice on a piece of clean paper, catching it at the rebound, it should leave a greyish mark, but nothing more.

There are two ways of applying this ink to the print. One is known as "hopping," and is that which was introduced and advocated by Mr. Rawlins. In this, the brush is held an inch or more above the print and is allowed to drop on it and is caught on the rebound. This is certainly the method for the beginner. The other is "dabbing," and is exactly what its name implies, the print being dabbed with the brush, lightly or forcibly as it may seem to require.

The result of allowing the brush to fall as in the hopping method will be to transfer a little of the ink to the paper. At first it may seem to adhere rather indiscriminately, but as the action is continued it will gradually be seen that the ink is only taking in the darker parts of the picture, and that even if a little adhered to the lighter portions for a little while, continued hopping removed it.

For here is the peculiarity of our print. If we apply ink to it with a brush and pick that brush off slowly, the ink remains behind on the surface of the print. If we pick the brush off quickly, it pulls away the ink with it.

So strong is this action that by very rapid "hopping" nearly the whole of the ink could actually be removed from the surface of a print that had been inked up. Hence the control, which is such a feature of the oil process.

It is a great mistake to rely too much on this power of removing the ink when once it has been applied. The print never looks so fresh and clean, but appears laboured and heavy. For this reason, then, we must



Awarded the Second Prize in the Special Subject Competition.

By Basil D. Haines.

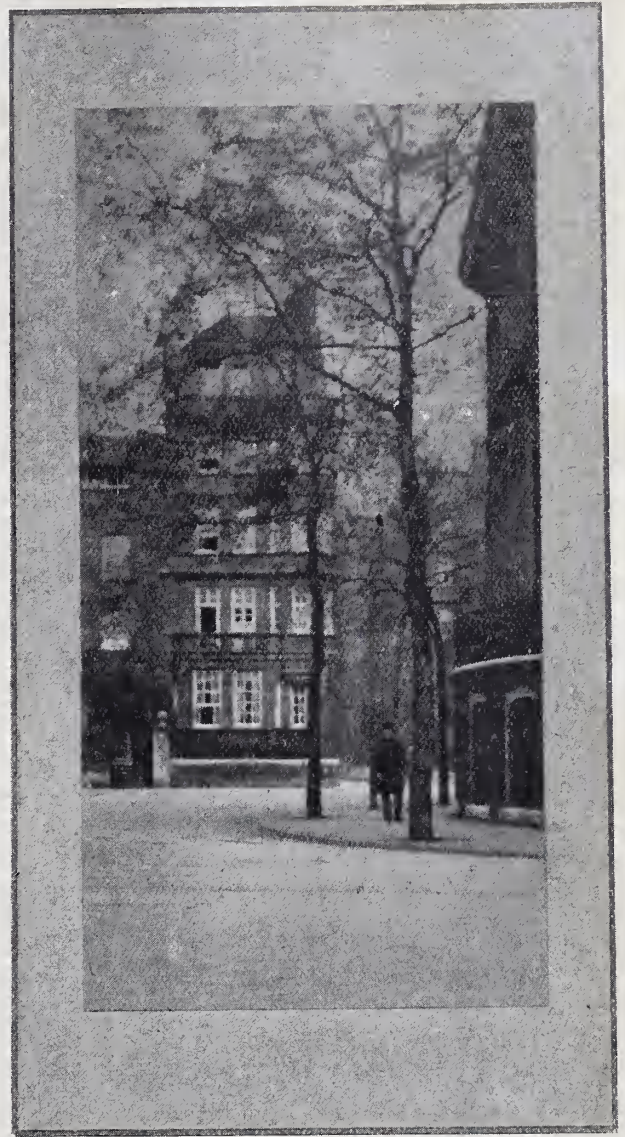
be careful not to over-ink any part. Patience, patience and lightness of touch, these are the things which the beginner must possess. He must be content to see his picture grow slowly, almost wearisomely so, under his hand; and only as he gets more proficient will he learn how far it is safe to expedite matters. The greater the haste to finish, the greater is the risk of spoiling the whole print. If this is the result, there is nothing for it but to remove all the ink by sponging over the print while it is held under the tap, and to start the whole operation of inking up *de novo*.

The inking up of a print will indicate almost directly whether the exposure has been correct or not. If the print refuses to take the ink at all except in the deepest shadows, or if where it does take it the result is coarse and granular, the exposure has not been sufficient. We may mix a mere trace of the medium with the ink, and so get it to takè, but the result will not be what it would be if the exposure had been correct. If, on the other hand, the shadows, and even the half-tones takè the ink freely, and hopping fails to remove it, then it is clear that over-printing has taken place. If the exposure has been correct, the continued hopping of the brush will gradually build up a print of good contrasts and of ample gradation. I have never yet succeeded in making a successful result from a print which at the commencement of inking up showed marked signs of either over or under-printing.

The hopping action rapidly deprives the brush of its supply of pigment, and to secure an even, smooth result the brush should be "hopped" a couple of times on the ink on the palette and a couple of times on the bare glass to even it up after every two or three strokes on the print during the early stages. Later on the brush gets more or less charged with ink, and does not need replenishing so often.

If the ink dries or hardens on the sheet of glass which acts as a palette, a trace of medium may be mixed in with a palette knife; but a better plan is to take a little fresh ink.

Some of my earliest troubles were eventually traced to the drying of the print during inking, and too much stress can hardly be laid on the importance of keeping it properly damp. In summer time a quarter of an hour is quite as long as it should be left lying on its pad of blotting paper, and at the first appearance of irregularity in the way it takes the ink it should be put back into cold water to soak for five or ten minutes, after the lapse of which time the inking may be resumed. At first, when the beginner is naturally cautious and anxious not to hurry the process too much, the print will require soaking two or three times during the inking up, and a point should be made of this, as in one's interest in the gradual development of the picture one is apt to lose sight of the way time is flying, and attempt to ink up after the print has become too dry. Later on it will be found easy to ink a print without leaving off more than once to rewet it, or in winter time with even a single wetting at the start. After wetting it the print should be drained and dabbed with a handkerchief as before until all the surface water is removed. The dabbing should be done lightly, not because there is any fear of injuring the surface of the print (this is fairly robust), but because, while we want to take off all the free water, we do not want the handkerchief



A Chelsea Corner.

By E. H. Roberts

to absorb any of the moisture which is actually in the pores of the gelatine itself.

Hairs and specks will be found troublesome at times. If they affect the inking they must be removed at once. This can generally be done by lifting them with a needle mounted in a wooden handle. They will adhere to the needle, or, if not, may be seized with tweezers. If they are on parts which are already inked up, it is best to wait until the print is finished.

When the inking up is finished, the print is simply pinned up to dry. The old inks used to take a long time to dry properly, but the special pigments made for the process allow a print to get quite dry and hard in a few hours. I have not tried varnishing oil prints, and have not found it necessary. There is no fixing or other after-operation to be applied to the print; and the only thing that remains is to clean the brushes. This is done by wetting them and rubbing them on a cake of yellow soap and then in the palm of the hand, repeating the operation until the lather is colourless, and then rinsing the brush and allowing it to dry.



A Method of Drying Gelatine Negatives Quickly.

By "Sigma." Special to "Photography and Focus."



METHYLATED spirit enables us to dry negatives very quickly, but its use is accompanied by one or two drawbacks. One of these is that in consequence of the solvent action of alcohol on celluloid, the method must not be applied to films; and so far as the writer is aware there is no way of avoiding this.

Another drawback which many have found—one that it is almost, if not quite, impossible to avoid—is due to the presence of the petroleum product, which is added to discourage toppers from drinking the spirit.

Methylated spirit is alcohol in which some nauseous compound is present in a proportion laid down by the Legislature; and so long as this addition is made the alcohol is more or less duty free. Unfortunately, the addition seriously interferes with many of the industrial uses of the spirit. If water is added to methylated spirit, the mixture becomes white and opalescent. This is caused by the water preventing the spirit from holding the "methylating" substance in solution; and as this is of an oily or greasy character—anything with which such watered spirit comes in contact will be made greasy. When a negative with its gelatine coating full of water is placed in a bath of methylated spirit, the water in the film at once causes some of the greasy matter to separate out, and the film is soiled by it. Everyone knows who has had much of this to do that negatives dried with spirit are never so clean in appearance as those plates which have been allowed to dry spontaneously in the air in the ordinary way.

The writer's business needing some quick-drying method very frequently, he was led some months ago to adopt the following plan, which was first described in *Photography* by Mr. G. T. Harris, and he has since found it very effective as well as very cheap. A pint of methylated spirit, three ounces of methylated sulphuric ether, and two ounces of anhydrous potassium carbonate should be purchased from a reliable chemist, and put into two well-stoppered bottles, half in each, labelled No. 1 and No. 2. It can be used over and over again almost indefinitely if the directions given below are followed out.

The negative to be dried is taken out of the last washing water, and stood up to drain for a minute or so. Its back and edges are then wiped quite dry, and all the water on the face

that can be removed by dabbing with a cloth is got rid of in that way. It is then placed in a clean, dry dish, and covered with No. 1, taking care that the carbonate is not poured out on it, as well as the liquid. After two minutes in No. 1, it is taken out, drained as before, and put into a fresh dish and given two minutes in No. 2. It is then again drained, and the surface gently wiped with a clean fluffless cloth. In a minute it should be perfectly dry. The solutions are poured back into the right bottles, and kept well corked or stoppered.

Unless two separate baths are used like this, the drying



A BANK OF WILD FLOWERS.

By WALTER SELFE.

Awarded a Prize in the "Focus" Landscape Competition.

will take much longer, and the solution will need renewing much sooner. The carbonate absorbs the water which the spirit extracts from the negative. To assist this, the bottles should be shaken occasionally.

The appearance of the carbonate is a reliable guide, showing us how much water it has absorbed. As soon as it gets decidedly wet, the spirit should be poured off it, the carbonate spread out on a plate for a few minutes to allow any remains of the spirit to evaporate, and then be put into a hot oven until thoroughly dry; or, if preferred, a fresh supply of the carbonate, which is very cheap, may be substituted.

The No. 1 solution will be found to need renewing long before No. 2, and a good plan I find to be to renew the No. 1 only, making it when renewed No. 2, and making the used No. 2 No. 1 until it in turn needs renewal.



A CRITICAL CAUSERIE.

By "The Bandit"

Concerning some Photographs by Beginners.

"Critics?—appalled I venture on the name,
Those cut-throat bandits in the path of fame."—BURNS.

WHY should it be impossible to illustrate jokes by photography? But perhaps it is possible, so I should put the question, "Why are jokes so rarely illustrated by photography?" One may safely say that the photographically illustrated joke is a nearly unexplored by-path of our craft.

The reason of the photographic joke's neglect is simply because it is so very difficult to contrive. For when the joke merely depends on the excellence of the histrionic ability of the model, then the thing becomes "funny" rather than "humorous"—and there is a deal of difference between the two. A photograph of Harry Lauder smiling his inimitable smile may be funny. The smile itself may be full of humour. But the *picture* of the smile is not humorous. Compare the photograph with a really good "Punch" sketch, and you see the contrast immediately.

The sketch and the legend below it go hand in hand; they are complements of each other; sometimes no legend is needed to make us realise the humour of the sketch. The humour is less in the models than in the way they have been drawn. But in the photograph of Harry Lauder the humour is all to the actor's credit, none of it to the photographer's.

These random reflections were aroused by the task which I recently set myself of looking through a big batch of cat and dog pictures which had been entered for *Photography and Focus* competitions. Many of the subjects are frankly funny. Many were comical, though not precisely comic. And although the *idea* of the joke in most cases obviously originated with the photographer, the *fun* of it depended finally on the model.

"The Nasty Medicine" is a typical example. The fun of this, traced re-

lentlessly to its source, consists of crediting a dog with human attributes. Had the photographer used his grandmother as a model, and posed her with a shawl round her head and gazing at a bottle, the effect would have been too grimly near the afflictions of real life to be truly funny. Or else it would have



Ready for a Spin.

By E. Wise.

aroused that vulgar guffaw which rewards the "Laughable Snippets" cut of an old man falling on a piece of orange peel—a type of "humour" which I venture to think is not aimed at by the readers of *Photography and Focus*. But because he has posed a dog instead of a human being, the jest passes muster—thanks largely to the accidentally caught air of dubiety on the dog's countenance.

But what, after all, is the use of the picture when we've got it? The smile it raises is but a fleeting one. Frame the picture and hang it on your wall and you would be sick to death of it in a week. Frame a good "Punch" sketch, and its merits would endure for a lifetime. The joke itself might stale, but the art with which the joke is presented would be ever fresh.

Ars est celare artem—one of the prime weaknesses of these would-be funny photographs is that they are too plainly



That Nasty Medicine.

By Ernest Robertson.

painstaking. A joke should be spontaneous, or at least seem so. Look at "Ready for a Spin." What a job it must have been to pose that dog on the bicycle and get him to hold the pipe in his mouth! Spontaneity? There's not a trace of it in this. Its laboriousness makes one feel tired; the smile fades after the first glance and gives way to a feeling of depression at the thought of the amount of labour expended to produce so unimportant and ephemeral a result.



Waste Paper.

By D. S. Brown.

"Waste Paper" is a relief, for here the "props" and preparations were few, and thank goodness there is a hearty grin to be got out of the mere smugness of the dog's face, without bothering one's head about the fact that he—or she—is ensconced in an incongruous basket.

"Happy Moments" is a photograph which achieves the same kind of success; the contrast between the respective visages of the two kittens is comical, and the only "accessory" that has been employed—the hat—hardly obtrudes itself at all.

The reason these two pictures are better than the first two is because they are more extemporaneous, not because the models are superior. These two look easy, the first two look difficult; and to "joke wi' deeficulty" is the premier crime in the aspiring humorist's calendar.

My fifth illustration is not a picture of dogs or cats, but of children; and I have purposely chosen it as a relief, so to speak, from the monotony of the Funny Animal series. It is entitled "A Queer Basketful," and is one of those impromptus which often are a bigger hit than the most carefully pre-

pared and stage-managed efforts of the photographer.

The boy is a shade too self-possessed, but the abandon of the little girl could not be bettered. She is in ecstasy of half-uncomfortable laughter. Look at her face, then quickly cast your eye to the face of the supposedly laughing kitten in "Happy Moments." Isn't the real better than the imitation? The kitten's laugh is a miracle of its kind, but competing with the little girl's laugh that of the dumb animal is completely outclassed.

The kitten is funny because of its imaginary resemblance to a human being. The little girl is funny because she is a human being. She evokes our sympathy; we laugh *with* her. But we only laugh *at* the kitten.

Here, I fancy, is the secret of the failure of the average would-be funny photograph. It is grotesque rather than real. It is what is called "funny" not because it is true, but because it is untrue.

Whether it can ever be done I know not, but of this I am sure—photography will be available as a means of humorous art when it can be made to render humanity's frailties and joys and sorrows, and laugh with the merry-makers or sufferers rather than at their merrymaking or suffering. The humorous photograph will be true in the first place, and only perhaps have a tinge of caricature as a secondary



A Queer Basketful.

By Miss Otta Shankland.

ingredient. It will stand or fall by that truth. And somehow or other, by hook or by crook, when that time comes the photographer will be the humorist, not his model.

None of the photographs reproduced this week come up to that standard. But they're beginnings, and may show the way to some genius who will develop this neglected line of camera picture-making.

Of one thing only am I perfectly certain. The said genius will *not* manufacture his humour out of cats and dogs. Human nature itself is his only hope.

"AIDS TO VISION" is the title of a very well illustrated price list of field glasses, telescopes, etc., for naval and military officers, sportsmen, naturalists, etc., which has just been issued by Messrs. Ross, Ltd., of 11, New Bond Street, London, W.



Happy Moments.

By J. R. Richardson.

Correspondence

For the free discussion of all matters of general interest to photographers

The Editor is not responsible for the opinions of his correspondents.

WAISTCOAT POCKET CAMERAS.

Sir,—I have been greatly pleased to find so many of my fellow readers of *Photography and Focus* took an interest in the article on waistcoat pocket cameras which you printed in your issue of September 1st. The number of letters I have received on the subject shows that there are many who want something of the kind. I did not mention the name of the particular camera which I myself had been using, as my article was in no sense intended to be an advertisement of one make, but a plea for the use of small cameras generally. As a number of your readers have expressed a desire to know what is the instrument I myself use, I may perhaps be allowed to state that it is known as the Blocknote No. 1, which fitted with a Zeiss-Protar lens cost me (with accessories) about £9. The makers are Messrs. Gaumont, of Sherwood Street, Piccadilly Circus. Perhaps those of your readers who have written me will accept the publication of this letter as a reply.

Yours, etc.,

C. V. REDWOOD.

THE POSITION OF THE LIGHT IN THE DARK ROOM.

Sir,—After reading Mr. C. Menzies's article on the above subject (*Photography*, September 8th, page 369), I find the author omits to mention one little item which I find, from my own experience as a photographic dealer, needs to be particularly impressed upon amateurs, especially beginners. It is that the lamp should be raised above the level of the working space.

A beginner's dark room is not always an altogether well-arranged affair, but he can generally move his lamp wherever he wants it. It is not at all an uncommon thing to find a man working with his lamp on the same level as his dishes, and he naturally has to work close up to it in order to be able to see anything at all, and gets his negatives foggy as a result, whereas if he has his lamp raised, say, six or eight

inches above the level of his working space, he can work several feet away from it and see a lot better everything that is going on in his developing dish. He does not want light—not even red light—on the dish all the time, and can easily cover up with a piece of wood or cardboard. It is a great advantage to use a lamp with an adjustable shade.

Further, lamps are made to burn either paraffin or colza; the paraffin lamp has a differently arranged burner, but it is considered quite the usual thing (among beginners) to burn paraffin in a lamp never intended for it, with the result that the operator has to keep turning up more wick and finishes up in a smoky and choking atmosphere.

Yours, etc.,

C. KEMSEY-BOURNE.

WHY NOT A CLOCKA?

Sir,—As an old photographer I was very interested on reading your remarks recently concerning small pocket cameras, i.e., really so small as to be carried in the pocket *always*. I have been using thus one of the "Ticka" cameras, which are certainly most ingenious and practical little machines, but the pictures are too small.

Since using this instrument, I have always wondered why the makers did not bring out a larger edition of the same idea. Such a camera could then easily take pictures of twice the linear dimensions of the Ticka, and still be small enough to be easily and always carried with one; 3in. diameter and 1½in. deep should do it, with a lens to pull out, and capable of being twisted round so as to work a diaphragm and a roll film to give twenty-five pictures 1½in. × 2in. Such an instrument would, I am sure, appeal to countless persons, artists, authors, and such like, and as for a name, might I suggest a "Clocka."

Yours, etc.,

BUDE.

THEFT OF A CAMERA.

A KINGSTON-ON-THAMES correspondent sends us an account of an unfortunate experience, which may be a warning to other of our readers who are advertising apparatus for sale. "I advertised a camera in *Photography and Focus*," he writes, "and on the same morning that my advertisement appeared a young fellow called at my house saying he would like to see the camera. As I had not told my wife the advertisement was appearing that day, she told him she knew nothing about it, but that if he liked he could call on me at my business address (in the town) which she gave him. At about 11.30 he called upon me and told me that he had been to my house, and that my wife had told him she knew nothing about the camera and had referred him to me (which, of course, was all perfectly true). He said he was just going for his holidays, and asked if my wife would let him look at it if I gave him a note. I said 'certainly' (anything wrong, of course, not entering my head) and gave him the note, written hurriedly in pencil, asking my wife to let bearer see my camera. This he took to my wife, but in the meantime altered the word *see* to *take*, so that when he delivered the note in my writing and on my own paper, the camera was given to him. We have never

seen anything more of him or the camera. Of course, I at once put the matter in the hands of the police, but up to the present have heard nothing."

INDIVIDUALITY.

THE president of the Glasgow Photographic Art Circle, Mr. A. H. Duncan, in his address at the opening meeting of the session, said that it was best to make the most of the apparatus that we possess, with a due regard to its limitations, and not to suppose that the lens or camera used was a matter of so much importance as is sometimes attributed to them. With regard to processes in the same way—oil, gum, carbon, platinumotype, are each good processes—but one process need not be made a reason for not seeing anything good in any other, even if the other is a modest matt silver print, or a toned bromide enlargement.

Individuality should mark the work of each photographer, and if we have not yet got the length of "one exposure one picture," the mark of individuality in our pictures should be as good as the signature to an artist's work. A high ideal should be cultivated as to what art or the pictorial means to the individual; and it should not be lost sight of in the mere names of process, however good or new the process may be. A process is only a

process after all. It is the personality that counts; the individual worker, and not the process, camera, lens, or any other part of the apparatus. In the talk about wonderful new processes, splendid lenses and other things, the individual who is behind all these is sometimes overlooked altogether or relegated to a second place.

WEST COUNTRY OUTINGS.

UNDER the modest title of "Outings from Plymouth," the Western Morning News Co., Ltd., of Plymouth, has published a most useful and well arranged little guide by Mr. Charles R. Rowe, who was for many years assistant editor of *Photography*, and is well known to many of our readers. The book sells at threepence, and will surprise even old Plymouth residents, we fancy, at the wealth of interest which lies all round their home. Photographers who intend to visit the West Country would do well to get this guide beforehand, and to learn from it how much there is to see, and how readily accessible it is from Plymouth and its neighbourhood. Although intended to act as a general guide, Mr. Rowe's long standing connection with photography has made it more than ordinarily applicable to the wants of the tourist with a camera, as those will find who take it as their guide.

OUR —LANTERN SLIDE— COMPETITION.

AWARDS TO SINGLE SLIDES. SLIDES TO BE PURCHASED.

CLASSES.

- | | |
|--|---|
| <p>A. Landscape with Figures (including seascape, etc.)</p> <p>B. Landscape without Figures (including seascape, etc.)</p> <p>C. Architecture.</p> | <p>D. Portraits and Figure Subjects.</p> <p>E. Still Life.</p> <p>F. Scientific Subjects.</p> |
|--|---|

RULES.

- (1.) All are open to amateur and professional without any restrictions. All slides must measure $3\frac{1}{4}$ in. by $3\frac{1}{4}$ in.
- (2.) All slides which take any award will become the property of *Photography and Focus*, and will be sent round amongst the societies and other such associations as apply for the loan of them. Any other slides may be selected by us for circulation in this manner, and will be paid for at the rate of half-a-crown each.
- (3.) Competitors may send any number of slides in any class, and may be recorded as winning any number of awards, but no competitor will actually receive in the competition more than one silver plaque, one bronze plaque, one bronze medal, and one certificate, on which all his awards will be recorded.
- (4.) Every slide must bear the competitor's name, its title, and its class. With the slides must be sent an envelope containing the name and the full address of the competitor, a list of the titles of all the slides he is sending in, and the class in which each is entered, together with a stamped and addressed label (not loose stamps) if the slides are to be returned if unsuccessful. But under no circumstances can the editor or the publishers accept any responsibility for slides sent in for competition or for their return.
- (5.) All carriage or postage must be paid by the competitor.
- (6.) The last day for receiving is Monday, October 19th. The slides must be addressed "Slide Competition, the Editor, *Photography and Focus*, 20, Tudor Street, London, E.C."
- (7.) One silver plaque, one bronze plaque, one bronze medal, and four certificates, are offered in each class.
- (8.) Not more than one slide from a negative can be admitted, nor may any slide compete which has before won an award.



BEGINNERS' COMPETITION.

Open to all photographers who have never taken an award.

PRIZES.

First Prize.—A signed copy of "The Complete Photographer," a half-guinea work by Mr. Child Bayley, now in its second edition.

Second Prize.—A free subscription to *Photography and Focus* for twelve months.

One or more certificates of honourable mention will also be awarded.

RULES.

(1) Each competitor can send as many prints as he likes, but each print must bear on the back the coupon, published each week, the name and address of the sender, the title of the picture, and no other writing whatsoever.

(2) No print will be eligible that is larger than 5½ in. x 3½ in. (postcard size) or 5 in. x 4 in.

(3) No print must be mounted.

(4) No handwork other than simple spotting is permitted on negative or print, nor shading or dodging of any kind. It is distinctly understood that entry in the competition implies a declaration by the competitor that this rule has been complied with; and in case of dispute, the editor shall have the right to call for the negative from which the entry purports to be a simple direct contact print.

(5) No prints will be returned, and no correspondence with regard to the competition can be undertaken.

(6) The publishers of *Photography and Focus* shall have the right to reproduce, without payment, any of the prints sent in, winning or otherwise. But except the winning prints, the names of competitors of other prints that may be reproduced will not be published without the competitor's consent.

(7) All entries must be addressed "Beginners' Competition," the Editor of *Photography and Focus*, 20, Tudor Street, London, E.C., and must be delivered at that address by the first post on the closing date at the very latest.

CLOSING DATE.—Wednesday, Sept. 30th.

SLIDE COMPETITION.

Full particulars of the annual lantern slide competition, entries for which close on Monday, October 19th, will be found upon page 410 this week.

SPECIAL SUBJECT COMPETITIONS. OPEN TO ALL READERS.

PRIZES.

First Prize.—"Photography" Plaque in Silver.

Second Prize.—"Photography" Plaque in Bronze.

Third Prize.—"Photography" Medal in Bronze.

One or more certificates will also be awarded.

RULES.

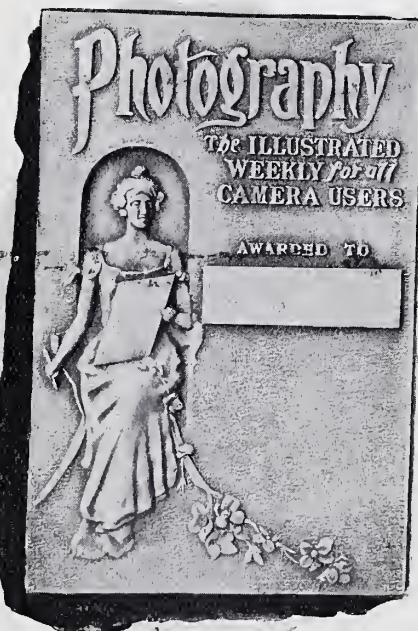
(1) The subject of each photograph entered must be that announced for the particular competition.

(2) Each competitor can send as many prints as he likes, but each print must bear on the back the name and address of the sender, the title of the picture, and no other writing whatsoever. Each print must have attached to it a coupon for the competition of the month, which will be found in each issue of the paper.

(3) No print must be mounted. No handwork other than simple spotting is permitted on negative or print, nor shading or dodging of any kind. It is distinctly understood that entry in the competition implies a declaration by the competitor that this rule has



"Photography" Medal. Actual size.



"Photography" Plaque. Actual size.
Weight in silver over three ounces.

ADVANCED WORKERS' PRINT COMPETITION.

PRIZES.

First.—"Photography" Silver Plaque.

Second.—"Photography" Bronze Plaque.

Third.—"Photography" Bronze Medal.

One or more certificates of honourable mention will also be awarded.

RULES.

(1) All photographs must be sent addressed "Advanced Competition," the Editor of *Photography and Focus*, 20, Tudor Street, London, E.C., postage paid, to reach there not later than the first post on the closing date, and must contain a stamped addressed envelope or label (not loose stamps) if they are to be returned.

(2) Each photograph must be mounted, but not framed. Prints in slip-in mounts are not eligible. Each must bear on the back the name and address of the sender and the title of the picture. No letters or other communications must be enclosed with the prints. Every print must bear attached to its mount a coupon for the competition of the month, which will be found in each issue of the paper.

(3) Each photograph must be the work of the competitor as regards selection and arrangement of the subject, exposure and development of the negative, and printing, development or toning, and mounting of the print.

(4) The prints which are accompanied by stamped envelopes or labels will be criticised by post, and the editor shall have the right to reproduce any of the prints, winning or otherwise. The awards will be made a fortnight after the closing date.

(5) Awards may be increased or withheld at the absolute discretion of the judge, and in all cases of dispute the decision of the editor will be final.

(6) There is no restriction as to the eligibility, except as set forth in these rules, and except that the same negative must not be used more than once in the competition. That is to say, that a print from it once submitted, all further prints, however varied, are ineligible.

(7) Neither editor nor publishers of *Photography and Focus* shall be held in any way responsible for the safety of prints or for their return to the competitors.

(8) The sending of a print to the competition will be regarded as a declaration to the effect that it is eligible under these rules, and that the competitor agrees thereto.

CLOSING DATE.—Wednesday, Sept. 30th.

been complied with; and in case of dispute, the editor shall have the right to call for the original negative from which the entry purports to be a simple direct contact print.

(4) No prints will be returned, and no correspondence with regard to the competition can be undertaken.

(5) The publishers of *Photography and Focus* shall have the right to reproduce, without payment, any of the prints sent in, winning or otherwise. But except the winning prints, the names of the senders of other prints that may be reproduced will not be published without the sender's consent.

(6) All entries must be addressed "Special Subject Competition," the Editor of *Photography and Focus*, 20, Tudor Street, London, E.C., and must be delivered at that address by the first post on the closing date at the very latest.

SUBJECTS AND CLOSING DATES.

A Seaside Scene. Closes Wednesday, September 30th.

A Portrait of a Lady. Closes Saturday, October 31st.



Telling how the Sun itself is Photographed.

Only Possible during a Hundred Minutes in Forty Years.

AN old and much-quoted saying has it that one "cannot see the wood for the trees." It receives a fine exemplification in the attempts of the astronomer to study the sun, for the greatest difficulty which confronts him is the blinding glare of the orb itself, which completely shrouds from view the details on its surface. Nor can any screen that we can impose here cut off the greater proportion of the disc and allow us to study the edge which is left. To be effective such a screen must be held further off than we can hold it; but, fortunately, nature now and again provides for this want. She interposes the moon at a distance of some two hundred and fifty thousand miles, sliding it between us and the sun when an eclipse takes place. The distances of the sun and moon from the earth happen to be such that under ordinary circumstances the disc of the moon seems almost the exact size of the disc of the sun, although actually the one is only a minute fraction of the other in size. Still, the sun being so much further off (three hundred and sixty times as far), the moon at a total eclipse just screens the entire disc of the sun, and enables us to study what immediately surrounds it without being dazzled by the glare.

It is for this reason that astronomers attach so much importance to the observation of eclipses of the sun. True, of late years, Janssen and Lockyer have worked out a method of damping down some of the light so that the rest can be studied without an eclipse; but this does not do all that an eclipse will do, so that these phenomena are still the occasion of expeditions and observations innumerable.

In a very interesting communication to the "Scientific American," Professor Mitchell points out that the modern scientific study of eclipses of the sun dates only from 1868. Since that year the observations that have been made have solved a large number of problems concerning the sun, its constitution, its condition, and its surroundings. Yet eclipses only last a few moments, and since that year the total duration of all the eclipses added together is less than a hundred minutes. An hour and a half all told, divided into many separate portions of a few minutes each, and broken into by bad weather and other adverse circumstances, represents the time which astronomers have been allowed for observation, on which most of our knowledge of the sun is based.

I have set this down somewhat in detail, because it explains how it comes about that photography plays so important a part in the study of the sun.

Astronomers have photographed the planets, but the pictures they obtained only confirmed what had already been seen by the eye, and did not make any notable addition to our stock of knowledge. But with a phenomenon which only lasts two or three minutes, and occurs only at long intervals, the value of the camera is apparent. Photographs may be taken in the few moments that are available, and studied at leisure afterwards. And to make matters still easier, we are dealing with the sun itself, so that there is plenty of light, even after it has been attenuated in spectroscopes and other apparatus, for the plate to be affected with a very short exposure.

Accordingly an eclipse expedition carries a whole battery of cameras. Some are of the ordinary type, except that they generally have long focus or telephoto lenses, so that the image of the sun may not be so minute. Others are attached to spectroscopes, polariscopes, and other instruments, all designed to utilise to the utmost the short time during which the moon is covering the disc of the sun. So that one may secure records at a single eclipse which require months of painstaking work to read all their message.

The study of the sun at the time of an eclipse takes many forms. The most interesting is perhaps the investigation of "the corona." When the moon covers the sun's disc we see for the first time that all round the well-defined circular orb there is an immense mass of some light-giving substance (a glory or crown), which is appropriately named the corona. It extends many times the diameter of the sun itself in certain clearly defined directions, and its shape alters according to the season, for there are seasons in the sun, although we do not yet know how they are produced. Every eleven years or thereabouts the condition of the sun is the same. Sun spots pass from a minimum to a maximum and back again every eleven years, and the shape of the corona varies in the same way. This corona may be photographed with an ordinary camera, and, indeed, this has so far proved to be the best way of recording its extent.

Another work which photography assists at the time of an eclipse is in the search for a new planet. Mercury is the nearest to the sun of all the planets known to us, and the study of Mercury is made very difficult from its nearness to the great light-giver. The movements of Mercury have long suggested to astronomers that there must be another planet still nearer to the sun, but hidden from our eyes by its blaze, and so, whenever the moon interposes, plates are exposed at the focus of powerful telescopes, not

on the sun itself, but on its near neighbourhood, to see if any trace of another planet can be detected. So far nothing has been discovered, and so the movements of Mercury go unexplained.

Then there is the spectroscopic study of the sun—a field of almost unlimited work. Every photographer knows of the fine black lines (the “Fraunhofer lines”) which appear when the sun is examined in a spectroscope, and tell us the nature of the substances in its glowing vaporous envelope which give rise to them. These lines look black because we see them on the dazzling background of the light from the body of the sun itself. The vapour which causes them is a mere thin layer over that body. At the moment when the moon has covered the body of the sun and for just one instant we see the edge of that thin layer, the lines to which it gives rise no longer appear dark ones. Their bright background has been screened off, and they flash out as bright lines, only to disappear almost at once as the motion of the moon covers up the thin rim of light, or else uncovers the rest and hides them again. This is called the “flash spectrum” from its sudden appearance and momentary

character, and anything like a detailed study of it is dependent entirely on the photographic plate.

Then there are those wonderful columns of glowing gas, the prominences—masses of hydrogen and calcium emitting a brilliant crimson, violet, or purple light, and extending often a hundred thousand miles above the general surface. These are studied during eclipses, although photography gives a method of watching them at other times. The prominences emit a particular violet light, due to calcium—a light which readily affects the photographic plate. It has been found possible by means of a spectroscope to weaken the general light from the sun, dispersing it over the entire spectrum. But in doing so this particular violet light, being all of one kind, is not weakened, and so the prominence can be photographed without the plate being fogged by the encompassing glare.

There are other photographic means by which the study of the sun is aided, but space does not permit of their mention. Some idea from this article may be gathered, however, of the very great part which photography plays in this phase of astronomical research

REMARKABLE NATURE PHOTOGRAPHS.

1.—Young Sparrow Hawks from Life.



They grow in beauty.

By J. Herbert Saunders.



A SILVERY PATH.

BY WILLIAM FINDLAY.

Awarded a Certificate in the Advanced Workers' Competition, July.

Imperial Orthochrome Plates

**An added
power**

in the hands
of the photographer.

They are
**specially
helpful**

at this season
of the year

when the reproduction of the beautiful

Autumnal Tints

is so important a matter in landscape photography.

Unrivalled
in brilliancy,
wealth of detail,
and
delicacy of tones.

Imperial P.O.P.

THE IMPERIAL DRY PLATE CO., Ltd., Cricklewood, London, N.W.

BUSINESS NOTICES.

OFFICES.—20, Tudor Street, London, E.C. Telegrams: "Cyclist, London." Telephone: 5610 and 5611, Holborn.

PUBLISHING DATE.—PHOTOGRAPHY AND FOCUS is on sale throughout the United Kingdom every Tuesday morning.

SUBSCRIPTION.—PHOTOGRAPHY AND FOCUS will be forwarded regularly at the following rates:

GREAT BRITAIN.		ABROAD.	
	s. d.		s. d.
Twelve Months..	6 6	Twelve Months	10 10
Six Months.....	3 3	Six Months....	5 5
Three Months...	1 8	Three Months..	2 9
Single Copy....	1½	Single Copy....	2½

REMITTANCES.—Postal Orders, Cheques, etc., should be crossed and made payable to LILFFE AND SONS LIMITED.

ADVERTISEMENTS.—All communications on advertisement matters should be addressed to The Advertisement Manager, PHOTOGRAPHY AND FOCUS, 20, Tudor Street, London, E.C. All copy for displayed advertisements for the issue of any particular week must reach Tudor Street by the first post on Monday morning in the week previous.

PREPAID ADVERTISEMENTS.

SALE AND EXCHANGE (for Amateurs only).—1d. per word, minimum 9d.

PROFESSIONAL AND TRADE.—Three words minimum 1/-.

All advertisements to be inserted on these terms must be accompanied with remittance. To ensure insertion, letters should be posted in time to reach the offices, 20, Tudor Street, E.C., not later than first post on Wednesday.

BOX NUMBERS.—For the convenience of advertisers, letters may be addressed to numbers at the office of the paper. When this is desired, 2d. will be charged for registration, and three stamped and addressed envelopes must be sent for forwarding replies. Only the number will appear in the advertisement. Replies should be addressed: "No. 000, c/o PHOTOGRAPHY AND FOCUS, 20, Tudor Street, London, E.C."

DEPOSIT SYSTEM.—Persons who hesitate to send money to unknown persons may deal in perfect safety by availing themselves of our Deposit System. If the money be deposited with PHOTOGRAPHY AND FOCUS, both parties are advised of this receipt, and upon intimation of the arrival and acceptance of the goods, the money is forwarded, less a charge of 1/- for registration. The time allowed for a decision after receipt of the goods is three days. For all transactions exceeding £10 in value, a deposit fee of 2/6 is charged. Cheques and Money Orders should be made payable to the Proprietors, MESSRS. LILFFE AND SONS LIMITED, and addressed to them at Coventry.

PUBLISHING NOTICE.—Communications for the Publishers should be addressed to: LILFFE AND SONS LIMITED, 20, Tudor Street, London, E.C.

EDITORIAL NOTICES.

ADDRESS.—All communications for the Editor should be addressed to: The Editor, PHOTOGRAPHY AND FOCUS, 20, Tudor Street, London, E.C.

TO CONTRIBUTORS.—The Editor will be glad to consider original up-to-date manuscripts on photographic subjects. All contributions must be typewritten, or in very legible handwriting, on one side of the paper only, and should bear the name and address of the sender. Letters or communications arising out of matters already appearing in the paper are not paid for. The Editor disclaims legal responsibility for the safety of matter submitted to him, but he will endeavour to return rejected manuscripts, etc., when a stamped addressed envelope is enclosed for that purpose. No notice whatever can be paid to communications without the name and address of the sender, not necessarily for publication.

PRINTS FOR CRITICISM.—Readers sending prints for criticism of advice are notified that in all cases it is understood that by so doing permission is given for their reproduction, without fee, in PHOTOGRAPHY AND FOCUS.

PRINTS FOR REPRODUCTION.—Reproduction fees are only paid by arrangement beforehand. The sending of a print, without any condition stated, will be taken as permission to reproduce it without fee. The Editor will be glad to consider for publication, with or without letterpress, photographs of special interest, on terms to be arranged.

PAYMENTS.—Articles and illustrations are paid for on acceptance.

INTERVIEWS.—The Editor will be at 20, Tudor Street, on Wednesdays, between the hours of 9.30 and 11.30 a.m., but can only be seen at other times by appointment.



PHOTO-ENGRAVING AND LITHOGRAPHY. The London County Council School of Photo-engraving and Lithography, at 6, Bolt Court, Fleet Street, London, E.C., has just issued its prospectus and timetable for the session commencing September 21st. It can be obtained on application to the Principal.

AN EXHIBIT OF ENLARGEMENTS made by Messrs. Raines and Co., of South Ealing, London, W., from negatives by Herbert C. Ponting, F.R.G.S., forms a conspicuous feature in the exhibition of the Royal Photographic Society this year. Messrs. Raines are issuing a very tasteful little catalogue of the collection which occupies a good position in the South Gallery.

THE BORDESLEY DUPLEX TINTO-BOARD mounts are issued in assorted art tints, in sixpenny packets, containing 24 quarter-plate, 18 5 by 4, or 12 half-plate mounts. The mounts are very adaptable, being different in tint on the two sides, so that a packet gives plenty of choice. They are made by Messrs. J. and W. Mitchell, of the Bordesley Paper Works, Birmingham, and can be obtained from photographic dealers.

Books for . . . Photographers. .

Science and Practice of Photography.

By CHAPMAN JONES, F.I.C., F.C.A., F.R.P.S.
Price 5/- net. Post free 5/4.

Instruction in Photography.

By SIR WILLIAM ABNEY, K.C.B.
Price 7/6 net. Post free 7/10.

Practical Orthochromatic Photography.

By ARTHUR PAYNE, F.C.S.
Price 1/- net. Post free 1/2.

Successful Negative Making.

(Illustrated.) By T. THORNE BAKER, F.C.S. F.R.P.S.
Price 6d. net. Post free 7d.

All About Enlarging.

(Illustrated.) By C. WINTHORPE SOMERVILLE, F.R.P.S.
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MOUNTAIN PHOTOGRAPHS. An exhibition, entries for which close on November 15th, is being organised by the Club Alpin Francaise, of 30, Rue du Bac, Paris. Particulars can be obtained from the direction at that address.

IN THE PUSHAXE COMPETITION, which is being held by Messrs. Fuerst Bros., of 17, Philpot Lane, London, E.C., there are valuable cash prizes amounting to considerably over £100 for the best negatives, slides, and prints developed with Pushaxe.

TWO FINE CATALOGUES have just been issued by Messrs. Ross, Ltd., of 111, New Bond Street, London, W., etc. One describes and illustrates their lenses, cameras, lanterns, etc., and sells at 1s., the other is an abridged catalogue of cameras, lenses, and accessories.

THE BLACKBURN AND DISTRICT CAMERA CLUB has issued a neat calendar giving the dates of its meetings and the subject to be dealt with. A blank space is left on the calendar for a print, a prize being offered for the best one that is mounted thereon. The honorary secretary is now Mr. Arthur Clayton, of Clarence Villa, Blackburn.

THE WILLESDEN POLYTECHNIC Photographic Society starts its winter session on October 12th next, and has arranged an interesting series of lectures, demonstrations, etc. The subscription is 5s. per annum, and the honorary secretary, Mr. William Axten, of Ravenscourt, Ealing Road, Wembley, will be glad to furnish full particulars to anyone on application.

BARGAINS IN CAMERAS and other apparatus will be found in profusion in the autumn price list of second-hand and stock-soiled apparatus just issued by the Service Company, Ltd., of 292 and 293, High Holborn, London, W.C., and in the lists of second-hand apparatus issued by the City Sale and Exchange, 54, Lime Street, London, E.C., and another by the West End branch of the City Sale and Exchange, 26 and 28, King's Road, Sloane Square, London, W. All three of these are lists to be sent for, and both firms make a feature of supplying goods on the deferred payment system.

GOLDONA BEGINNERS' COMPETITION. The competition arranged by Messrs. John J. Griffin and Sons for prints on Goldona, and limited strictly to beginners, and to those who have never taken any prize in a competition before, has now been judged, and the awards are as follows: First prize (£3 3s.), James Wilkie; second prize (£2 2s.), Robert Welch; third prize (£1 1s.), W. E. Chetcuti; specially commended, A. J. Johnson. Mr. Johnson's print having been commended by the judges, it was awarded a special prize of half a guinea. We hope to be able shortly to reproduce some of the winning prints in this interesting competition.

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LOCAL REPTILES, which can be obtained post free on application to the Town Clerk, have been issued for Banff, Crediton, Kingsbridge and Salcombe, and Farnborough.

THE MANCHESTER MUNICIPAL SCHOOL of Technology has issued a prospectus of the photography and printing crafts department, which is under the management of Mr. C. W. Gamble, M.Sc., from which we learn that several excellent series of lectures, demonstrations, etc., have been arranged for the winter session, which commenced on September 14th. For particulars application should be made to the principal at the school.

THE HALIFAX PHOTOGRAPHIC COMPANY has been awarded the first bronze medal for its plates and papers at the Royal Cornwall Exhibition.

PHOTO-TELEGRAPHY. The "Electrical Review" for September 11th has an illustrated account of the Senlecq-Tival apparatus for telegraphing photographs. The essential novelty of the method is that the picture on a bichromated-gelatine film is converted into a magnetic record on a steel wire, as in the telegraph. This can be kept and used at any time to transmit the picture, the actual transmission then occupying only a few seconds instead of minutes.

THE NORTHERN PHOTOGRAPHIC EXHIBITION is to be held from January 6th to 27th, 1909, in the City Art Gallery, Manchester. The prospectus is ready, and can be obtained from the honorary exhibition secretary, Mr. S. L. Coulthurst, Broad Oak Road, Worsley, Manchester.

THE GORDON COLLEGE Amateur Photographic Association, of Geelong, Australia, has had a most successful session, to judge from the report just to hand. The honorary secretary, Mr. Horace L. S. Potter, asks us to point out that he has recently moved, his address now being 97, Weller Street, Geelong, W.

REPLIES TO CORRESPONDENTS

REGULATIONS.—(1) Envelopes must be marked "Query," and the "Enquiry Coupon" found elsewhere must be enclosed. (2) The full name and address in addition to *nom-de-plume* must be given. (3) Only one question on one subject is allowed in each letter. (4) Prints may be sent

for criticism, but a separate coupon must be sent with each print, and a stamped addressed envelope (not loose stamps) for their return. Queries are dealt with in strict rotation in the order received. Only "Urgent Apparatus" queries will be dealt with by post, for which purpose a stamped envelope must be enclosed.

NOEL HEATON (Harlesden).—We have sent your letter on.

BROMIDE (Tottenham).—A suitable formula was given in our issue for Sept. 15th, under the head of "Hints and Formulae."

PARSEE (Kirkee, India).—Houghton's, Ltd., are the makers, and would no doubt repair it for you; but surely it is a long way to send a diaphragm to be mended.

GATESHEAD (Gateshead).—Certainly it would be unwise to do so without permission. Why not write to the editor and ask for it? We expect it would be readily given.

H. C. (Westcliff).—We have only one address, which is published under the head of "Editorial Notices" every week. One part of formaline to nine parts of water is what we use.

J.J.B. (Custom House).—Nothing that you could back it with would keep it flatter, but would have just the opposite effect. The only plan would be to stretch it on a light wooden frame.

RISEING FRONT (Bow).—There is no satisfactory way of doing what you want. Experience is the only guide. No finder can be correct under all conditions, except the finder of a Reflex camera.

SPEEDS (Plumstead).—A. E. Staley and Co., 19, Thavies Inn, E.C., will measure your shutter speeds for you; but it is not advisable to attempt to correct the shutter, but merely to make a note of what the speeds actually are.

L. E. BARRETT (Brook Green).—"Photography in Colours," by R. Child Bayley, price 1/- nett, or post free from our publishers 1/2, gives particulars of the Lippmann process. No stamp was enclosed in your letter, but we do not reply by post.

P. W. HUNTER (Capetown).—We could not recommend the use of a telephoto lens on the camera you have at present. It would be better to get one with a much greater range of focussing. The "Adon" could be used if you are determined to have one.

NEGATIVE (Tunstall).—We are afraid you have no remedy if the negative is lost in the post. You sent it by post, and they would, therefore, be quite justified in returning it in the same way. If it is valuable, it might be well to consult a solicitor.

NEGATIVE (Leeds).—You are no doubt thinking of a ferricyanide-hypo reducer. If ten grains of potassium ferricyanide are dissolved in an ounce of water, and this is added to an ounce of ordinary fixing solution, you will get a solution which will bleach out any part of a negative to which it is applied.

PINHOLE (Newcastle-on-Tyne).—You do not say wherein you failed, so it is difficult to help you. There is a "Photo Miniature" on pinhole photography which you might consult. The distance depends on the angle of view you wish to include; there is no reason why you should not succeed with 5in.

F. E. B. HALL (Hawthornthwaite).—The commonest cause is excessive over-exposure; but in the case of the negative sent, we suspect rather some impurity in the developer. Hypo present in considerable quantity will do it, and fog due to examination by an unsafe light during development will sometimes bring it on.

FOGGE (Birmingham).—We cannot understand the trouble at all; it is possible it may be due to the varnish, in which case there is nothing for it but to clean it all off and revarnish the slides. We have never heard of as bad a case as this, although it sometimes happens that plates are affected if left in for very long.

JEFF (Stockport).—Such a slide would be eligible.

CABRA (Stroud Green).—Raines and Co., St. Mary's Road, South Ealing, London, W.

F. PETERS (Brighton).—See reply to M. Forni (Brighton), given on the next page.

DETAIL (Eltham).—6 $\frac{1}{2}$ in. or 7in. is a good length. We should select No. 5, 6, or 7 in your list.

GUZZE PUM (Bournemouth).—Certainly it is. The largest stop which will give a sharp picture is the one to use.

A. T. HUGHES (Llanrwst).—It ought to be possible. We should proceed as directed below in the answer to "Rusticus."

G. WILDE (Sutton).—Advertisements should be addressed to the advertisement manager; we have handed your letter on. Queries that are not in order are not kept.

E. L. F. (Stafford).—It is an old-fashioned C.D.V. portrait lens, of which there are many in the market. You might get £1 for it, but would find it hard to get a purchaser.

RUSTICUS (Warrington).—Hang up a black velvet cloth in front of the print—the larger the better, so long as it does not cut off too much light—and put the lens through a hole in the centre of it.

N. WEBLEY (Woking).—You had better get "All About Enlarging," which our publishers will send you post free for 7d. We cannot understand your enquiry. Any lens that can be used for taking photographs can be used equally well for enlarging.

F. TRAVERS (Gunnelsbury).—There is no book which describes the manufacture of gaslight paper, and the formulae are makers' secrets, although it is commonly supposed to be coated with a very slow or unboiled bromide emulsion. We admire your pluck in thinking of it.

FOCAL PLANE (Oldham).—None of the backings give an even coating unless machine coated. Nor is this at all necessary; as long as the glass is smeared all over a rough and blotchy coating matters not at all. One of those you have been using will no doubt be perfectly efficient.

SNAPSHOTTER (Finedon).—Many thanks for your suggestion, which we should be very pleased to adopt, were it possible. Unfortunately such information is altogether misleading; and in the interests of our readers, whom we wish to help and not to hinder, we prefer to omit it. Many thanks for your kind recommendation.

LEX (Ulverston).—We should describe the light as a safe one used with proper precautions. The discolouration is to be expected; and had the plates been exposed in a camera, it would not have made its appearance. An unexposed plate is always more foggy, as it has to bear the full strength of the developer all the time; whereas if it is exposed, the developer is gradually weakened, and also is restrained, from the formation of bromide by the action of the developer on the exposed parts.

HAROLD SMITH (Bradford).—The mantle must not be set further back, but should be placed so as to bring the rays to a focus near the back of the lantern objective. A reflector may be used, but makes little difference, and nothing whatever is to be gained by using more than one burner. The only way is to use a lens with a larger aperture or to employ a smaller disc. We have had very good results on an opaque screen with a 4ft. disc, but neither that nor acetylene is much use beyond that.



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Paper.

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Artistic
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*7 Grades for every class of negative
& every desired effect.*

*Delicate Mellow High Lights.
Rich Pure Black Shadows.*

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DEALERS
and

GRIFFINS,
Kingsway — London.

DICK (Plymouth).—We know of none.

CORK (Lanes).—As far as we know, it is quite insoluble.

R. J. MOFFAT (Highbury).—Our preference would be for No. 1.

PAT (Roscrea).—It is too soon to say; but we see no reason why they should not be as permanent.

A. C. G. (Brixton Hill).—The matter is hardly photographic, and we have no information on the point.

F. J. (Hartlepool).—It is due to the plate. We have noticed the same thing, and as far as we can see there is no remedy.

J. LAYCOCK (Bradford).—The print must have a coupon for the month (not for the week) in which the competition is held.

METALLIC (Bulwell).—The black precipitate may be dissolved in nitric acid, and the solution allowed to crystallise. This gives silver nitrate.

ANTIQUARIAN (Littlehampton).—We should advertise them in one of the papers going to people likely to be interested. There is no other way.

E. WILSON (Stroud Green).—Many thanks for the cutting, which we have passed on to "The Walrus," as we think he is best able to deal with it.

PERPLEXED (Cairo).—Except that about one-fourth the exposure will be required, there is no difference. There is no need to use a yellow screen.

P. T. (Soho).—There is only one way of finding this out, and that is by actual trial. The experiment is one you will have to make for yourself.

WESTBROOK (Kirkby Stephen).—The negative is masked with some opaque pigment across an opening in which has been placed a little piece of a collodion negative of the inscription.

T. MALCOLM WALKER (Hook Norton).—The formula was given on good authority, but we have had no experience of it ourselves. Undoubtedly neutral potassium oxalate is the salt meant.

L. HODGSON (Clapham Common).—We should advise you to apply to the manufacturers, who will no doubt be glad of the suggestion. We expect they will be able to supply you from stock.

F. B. C. (Cardiff).—No table has been published, but it is a very simple matter to calculate one. Full directions are given in "The Hand Camera," by Wastell and Bayley, price 1/- net, or post free from our publishers 1/2.

J. FORREST (New Cross).—Your conclusions appear to be correct, but it would be best to test them by actual exposures. There are street scenes and street scenes; and the only plan upon which reliance can be placed is actual trial.

MANTE (Tonbridge).—If the lines are perfectly straight parallel ones, they are not due to the mantle, but probably are fine friction marks on the negatives which do not show unless these are enlarged. We do not see how else they could be caused.

FIREWORKS (Plumstead).—We can give you no instructions, as we do not know what pattern of hand camera you have. Your best plan would be to try to find an opportunity of examining a stand camera fitted to take slides and work it out on those lines.

J. GAME (Kensington).—The spots are most likely due to iron particles in the water, from the tap or pipes. A gentle rub with cotton-wool after washing ought to prevent them in future. Insufficient fixing or washing would not be likely to cause them.

TROUBLED (Loddon).—Most of the plate-makers advertising in our columns supply them. Your best plan would be to write to the maker whose goods you prefer, asking him to tell you the nearest dealer who can supply you with them. But you may have to order them in advance.

HANDICRAFT (Birmingham).—It will be necessary to stop down, we expect. Probably 1/32 will be required; at any rate, this aperture might be tried, and if not small enough another substituted. Thanks for the suggestion, which we have passed on to our publishers. We quite agree.

D. DINNAGE (Arundel).—The print has all the appearance of having been developed in a solution which contains too much bromide, or else has been used for too many prints. The formula given by the makers yields beautiful black and white tones from soft negatives, if carefully made up.

H. R. M. (Dicker).—There can be no doubt that the trouble is in getting the glass thoroughly clean and in squeegeeing. The dull spots are due to imperfect contact between the cards and the glass. If you allow the cards to dry after washing, and then rewet and squeegee them carefully, you should have no further trouble.

C. TOLITE (Stockport).—A couple of good paraffin lamps, on each side of the subject, will do for copying very well; but were we in your position we should try two Welsbach gas burners, and supply them by a rubber pipe from one of the ordinary burners in the room. An acetylene bicycle lamp would hardly give light enough to be practical.

BLISTERS (Northallerton).—Probably the washing water and the hypo are not the same temperature. We should try drawing off the first washing water and letting it stand for an hour or two in the same room as the hypo solution. Then after five minutes in this the prints ought to stand the running water without injury. If the hypo is too strong it may cause blisters. Try two ounces to the pint.

M. FORNI (Brighton).—The simplest way would be to send the shutter to Messrs. Beck or Messrs. Staley (addresses amongst our advertisements) to be measured. Or it can be done at home by attaching a piece of white paper to the tyre of a bicycle wheel, spinning it round, and photographing it when it is rotating once a second. The distance the paper is moved, compared with the complete circumference, will then show the fraction of a second which the exposure lasted.

N. WELBY (Woking).—The arrangement proposed should be quite efficient.

ENQUIRER (Clerkenwell).—Tabloid ferricyanide reducer should answer your purpose.

WATERMARK (Stretford).—"The Chemical Shelf," started in "Photography" for October 1st, 1907.

GERALD B. JONES (Auckland, N.Z.).—We are sorry to say that we are not able to use any of the prints sent us.

H. (Carnarvon).—Raphael Tuck and Sons, Raphael House, Moorfields, London. E.C.; Valentine and Sons, Dundee.

T. GIDDINGS (Cheltenham).—It is impossible to reply to your card. The prints must be sent us before we can say anything.

W. BARNES (Harrow).—Entries for both exhibitions closed a fortnight ago, so that your queries are obsolete. We announced both several times.

C. S. B. (Chertsey).—The cause is under-exposure, unsuitable developer, or an unsafe light in the dark room; probably all three have played a part in it.

FOCUS (Dublin).—We do not know of any work dealing with the focussing of cinematograph cameras, unless Hopwood's "Living Pictures" meets the case.

F. EIGHT (Newcastle).—It is impossible to answer such a question in this column. We have a series of articles on the subject in type, which we hope will give you the information for which you ask.

E. K. HUNTER (Kenley).—We have not actually used the apparatus in question, but we believe it to be quite reliable. The principal thing to observe when buying is the workmanship generally. The design is a good one.

MERU (Dorking).—You can try immersing the negative for an hour or so in a combined toning and fixing bath, such as is used for P.O.P., followed by thorough washing; but if the stains are very bad there is no remedy.

G. B. (Anerley).—The best plan is to take one part of gold size to eight parts of turpentine, and to add to it sufficient lampblack to make a thin cream. This should then be tried on a piece of wood, and if it dries too glossy more turpentine added.

XYLONITE (Dover).—There is no way of straightening it except by heat and pressure, for which you have no apparatus. Perhaps you can do something by binding it between boards, putting it in hot water, and allowing it to get cold therein; but in all probability it is spoilt.

ACHROMATIC (Atherstone).—A single achromatic lens is one which, although apparently composed of only one glass, is actually built up of more (usually two), cemented together. This is done to secure "achromatism," for an explanation of which we must refer you to a treatise on optics.

PHOTUS (Eastbourne).—There is no apparatus on the market for the purpose. The little pictures, we believe, are made by the wet plate process, using a miniature camera furnished with a microscope objective. We thought the process was obsolete; we have heard nothing of it for a long time.

H. HOVEY (Edmonton).—The rule to find the distance between the lens and the enlargement, is multiply the focus of the lens by the ratio of enlargement +1, or it can also be got by multiplying the distance of the lens from the negative by the ratio. But the actual focussing must always be done on the screen.

W. W. BOYD (Ballyclare).—If you use an extra rapid plate and leave it for a few days, we expect you will get some kind of image upon development; but the process is not a practical one, and there is nothing for it but to fasten up the drawings in a good light, to photograph them to the required size, and make slides in the ordinary course.

INTENSIFIER (Birmingham).—We do not know what you have been using, but it sounds as if it were mercuric iodide without redevelopment, though it is always best to redevelop. The full working instructions will be found on pages 32 to 37 of "Intensification and Reduction," by H. W. Bennett, price 1/-, or post free from our publishers 1/2.

NOVICE (Stacksteads).—There is no history of photography in print at present, but there was a book bearing this title by Jerome Harrison, a copy of which can sometimes be picked up second-hand. The first chapter of "The Complete Photographer" gives an outline of the evolution of photography; and "Science and Practice," by Chapman Jones, also has a brief historical résumé.

PIFFLE (Cork).—The best plan is to use the developer to which you are accustomed, taking care on no account to over-develop. If the plate is under-exposed, it may afterwards be intensified with mercury. The time system is unquestionably the best, as it is a complete preventive of the two most harmful faults with under-exposure, viz., fogging from an unsafe light and over-development.

S. C. BONNERJI (Kalthat).—You might write Messrs. J. A. Sinclair and Co., of 54, Haymarket, London, S.W., sending them the amount you are prepared to pay, and asking them to do the best they can with it for you. You might try a small advertisement in our columns, but in that case it would be best to let Messrs. Sinclair deal with it. They are accustomed to such things, and you may put implicit confidence in them. We do not see any other course to pursue, as you are so far away.

MISS E. R. (Folfield).—Our contributor states that he is quite at a loss to explain what has happened, as he has never heard of any such result happening. Can it be that the acid fixing bath is at fault? We know of no reason why plain hypo should not answer, and we invariably use plain hypo when we develop with amidol. As it seems that all went well until the fixing, it looks to us as if the fault lay therein, and we should be disposed to try a fresh fixing bath. If it is strongly alkaline by any chance, it might act as you describe. The series may very possibly be resumed shortly.



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A splendid range of pure tones from
black to red by simple development
in gaslight. No darkroom required!

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WELLINGTON & WARD,
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Full Catalogue of the
"Wellington" Specialities
Gratis on application.



"The time has come, the Walrus said, to talk of many things."

It is with some trepidation that I determine to offer a few remarks on Press Cutting Agencies, because I doubt whether I shall succeed in sufficiently moderating my language to suit the columns of a respectable paper. Should you require to become acquainted with whatever is printed in the vast multitude of papers or magazines on any given subject you communicate with a Press Cutting Agency. By paying the tariff price you can get a hundred, a thousand, a million columns and paragraphs dealing with the subject of Gibson girls, cockroaches, pills, harems, gin, Queen Anne farthings, corsets, or whatever it may be in which you take an interest. The cuttings which reach me deal with the subject of photography. It would be nearer the mark to say that they are supposed to do so, but the little boys and girls who wield the scissors and hack out the columns use a discretion that is more wide than wise. If a legal case is reported as being heard "in camera" it is promptly classified as photography. The verbose account of some tinpot local police court case is forwarded in its interminable entirety on the strength of one of the witnesses stating that his uncle once worked for a photographer. Should a cabinet minister state in the House that "the reply is in the negative," the whole parliamentary report is at once deemed to be of photographic interest. You wonder why a ten column report of an inquest has any photographic connection until you note that the verdict was to the effect that the child died from "exposure." When the same photographic column appears in fifty different papers the whole fifty strips are hewn out and bunged in to add a little variety.

* * *

But one of the most intelligent performances of the paper hackers is to snip out an isolated paragraph from its context and to send that along. Here is a specimen cutting from the "Pelican." No doubt it was followed by explanatory details, but I have no idea what those details were. Please read for yourself. "The amateur photographer certainly has his—and her—uses, sometimes. The other day a foreign gentleman, of picturesque appearance, took up his sojourn at a boarding house at a South Coast watering-place. He fascinated everyone, appeared to have plenty of money, and proved such excellent company that when he suddenly and unexpectedly departed there was general grief."

* * *

That's all.

* * *

Was ever anything more aggravating? One is led confidently to anticipate a thrilling narrative that shall absolutely demonstrate that (at times) the amateur photographer has his (or her) uses. What a telling weapon it would furnish against those who are so fond of talking about "camera fiends" and "photographic cranks." Yet we are left absolutely in the dark. Who was the useful amateur photographer, and in what way was he (or she) useful? It could not have been the prepossessing foreign person. No amateur photographer fascinates everyone, or even appears to have plenty of money, or causes general grief by his departure. No amateur photographer can by any possible straining of terms be called excellent company. It certainly was not the fascinating alien who usefully used a camera. Then who was it? What happened?

* * *

The miserable paragraph worries me. For my own peace of mind I shall have to complete the story. You see, it was like this. The prepossessing foreigner was first missed from the dining table on Saturday evening. The boarders missed him very much. He was so fascinating. After dinner the boarders missed other things in the shape of jewellery and sundry portable articles of more or less value. This increased their grief. They grieved then so much over their departed fellow boarder that with one accord they ex-

pressed a fervent desire to behold him once again if but for a moment. But how to trace him? His name and address were obviously false. Prince, indeed!

* * *

It was precisely at this crisis that the amateur photographer took the middle of the stage and assumed the leading part. His name was Smartte. He remembered, he said, that a day or two before he had taken a snapshot of the promenade, and a few minutes afterwards had met the prepossessing foreigner. Perchance the said alien might be included in the view. Would the boarders wait a few minutes? They would. Exit Smartte.

* * *

In a few seconds he reappeared with a dripping negative of superb quality. He had found the promenade plate, developed, fixed, and washed it, all in less than one minute. With pardonable pride he pointed out to the group of amazed boarders a small spot about the size of a pin's head at the far end of the promenade. "That," hissed Smartte, "is the portrait of our missing friend." (Chorus of maledictions.) Dashing across the room he seized a decanter from the gold-plated tandalus, poured out a tumblerful of the golden contents, drank most of it to make sure it was whisky, and poured the remaining few drops over the plate. A couple of graceful waves in the air and the plate was dry. "Await me here," he cried, and exited again.

* * *

In an incredibly short space of time—a mere minute or so—he reappeared with two dozen beautiful enlargements, spotted, mounted on plate-sunk mounts, and finished in black and white in the best style. Each was a lifelike presentment of the maledictioned alien. Eagerly distributing these amongst the boarders he said in stern, inspiring tones. "There is your quarry. By that clue you can trace him. After him, even if he fly to the ends of the earth."

* * *

With an enlargement in one hand, and a loaded revolver in the other, Smartte, sleuth-hound that he was, made straight for the railway station. The booking clerk instantly recognised the lifelike portrait as that of a man of prepossessing appearance who, with a ticket for London and six heavy portmanteaus, had leapt into the express train as it rushed through the station. Fortune favoured Smartte. He was already hot on the trail. In ten minutes he was in London. In twelve minutes he was at the door of a dingy little eating house in a back street in Soho, whither he had traced his prey by dint of showing the life-like enlargement to 'bus drivers, shoe-blacks, bookmakers and others, who instantaneously recognised the fascinating foreigner and readily pointed out the way he had gone. In two words Smartte had ascertained from the greasy proprietor of the eating house that the portrait before him was that of one of his own waiters, who, alas! and he shuddered as he said the words—

(No room for any more.)

THE WALRUS.

SUBSCRIPTION.

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PHOTOGRAPHY

A JOURNAL FOR EVERY CAMERA USER.

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PUBLISHED WEEKLY.

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THE MEDWAY AT MAIDSTONE.

BY A. W. DALE.

Awarded the Bronze Plaque in the Special Subject Competition for June.



Personal Preferences.

The article on page 425 this week is a departure from "the usual thing" in photographic journalism. It is not a "how-to-do" paper, but a note of the reasons why some one particular photographer prefers certain apparatus and certain methods. He seems in most instances to make out a good case.

A Pocket Measure as a Viewmeter.

An enthusiastic landscape worker of our acquaintance employs a pocket yard measure as a view meter with satisfactory results, and as his method of doing so is very little known, although simple and effective, we may perhaps be permitted to describe it. He simply holds between his two hands a given length of the measure, stretching his arms out straight in front of him, and knows that when he does so all of the landscape he can see between his hands will fall upon the ground-glass and plate. All he has to know is the length of the measure which he is to hold out in this way, and this will differ according to the lens in use. To find out, the camera is set up on some fairly open subject, and is focussed. Two well-defined objects, one on each of the opposite ends of the ground-glass, are noted, and then, holding the measure at arms' length, we find out how far the two hands are to be separated, so as just to enclose the two objects. The distance so measured is the length of the measure which is to be used as the view meter with that particular lens. If several lenses are used, it is only a few minutes' work to ascertain the length for each, and when found it should be made a note of. The little spring measures with a steel tape answer admirably for this purpose, and take up little or no room.

Storing Negatives.

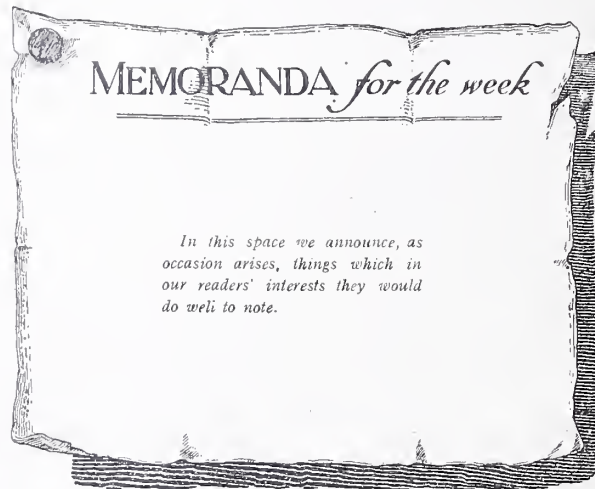
Every photographer who follows his hobby with any great activity soon finds that he is in the possession of a large number of negatives. He does not like to destroy them, even if he has no immediate intention of making any prints from them; for he believes that they contain pictorial possibilities which sooner or later he will be able to materialise in the form of finished prints. The question of their storage, especially if they are on glass, becomes a very serious one, because glass negatives take up a great deal of room. Some writers have advocated keeping them in grooved boxes, but

this is absolutely the most bulky form in which it is possible to store them. Besides, grooved boxes cost money; moreover, it is very doubtful whether a grooved box, in which the film of the negative is exposed to the air as much as possible, is not one of the worst ways of keeping negatives. The great proportion of the modern worker's negatives are unvarnished ones on gelatine plates. Comparatively few amateurs varnish their negatives, and there is little or no reason why they should, since, provided they are not allowed to get damp while being printed on a silver paper, they do not run any great risks from which varnish would protect them. Unvarnished negatives, put away in the boxes in which they originally came from the plate

factory, with no other protection than a piece of clean white, unprinted paper between each, will be found to keep perfectly in a reasonably dry cupboard or drawer. The chief risk they run is in the turning over they receive when some particular negative is wanted in a hurry, and most of this can be obviated by keeping a record of the contents of each box, either in the form of a written catalogue or, still better, in an album containing a set of rough prints from the whole lot of negatives. Each print in the album is

then marked with the number or other mark of the box in which its negative is to be found. This reference album system has other advantages beside facilitating the finding of any particular negative. It forms a good key to the pictorial material which the amateur has by him.

We have said that the photographer does not like to get rid of his negatives. There is nothing, apparently, which is so worthless as old negatives. Almost everything else has a selling value; but with the unsuccessful results of the labours of the amateur, not only is this not the case, but the very dustmen expect a bribe if they are to take them away, on the ground that they are not household refuse. The glass in small sizes does not pay for the cleaning; and even in 10 x 8 or larger, it is only if the photographer is a constructor of cucumber frames designed to take glass of the particular size that he uses that he will be able to make use of his failures. One famous photographer used to bury his wasters in his garden, while yet another tied them up in parcels of fifty or so and sank them in a pond. Perhaps after all the best plan is to keep



them—the good ones for the potentialities that are latent in them, the bad ones to mark our progress towards perfection, or as awful examples.

The Walrus and the Bandit were walking down the Strand,

But not as bosom friends should walk: they were not hand in hand.

For W. had said to B. ('twas like his blooming cheek!),
"You're only once a fortnight, while I am once a week."

Then answered B., "The reader requires full fourteen days

Completely to digest me. You would not have me craze

My victims by my lavishness? You would not have me seek

To overwhelm the public by appearing once a week?"

The Walrus lit a large cigar. "I wholly understand Your well-intentioned reticence," he said, in accents bland;

"One thought alone prevents me giving way to useless pique—

Your cheque comes once a fortnight, but mine comes once a week!"

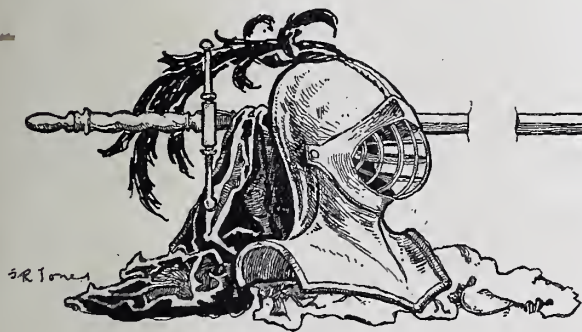
The Acid Fixing Bath.

Is the acid fixing bath, we wonder, used as much as it might be, or are many photographers content to go on fixing their bromide and gaslight prints, and their lantern slides, to say nothing of their ordinary negatives, in plain hypo? The precise advantages of an acid hypo solution are not, perhaps, quite as widely known as they might be. It is not simply a case of remedying any staining which may have arisen in the developer. The bath does more than that; although that, in itself, is not to be despised, especially in the case of prints.

The acidity of the bath is useful, also, because with most developing substances it at once stops development. The developers which are generally used—amidol is the chief exception—are only active so long as the solution is strongly alkaline, this alkalinity being generally obtained by means of caustic soda, or potash, or else with carbonate. The film of the plate or print is full of active developer when it is placed in the hypo, and even a preliminary rinse does not alter this state of things to any great extent. That being so, development goes on for some time after immersion in a plain hypo bath. With some developers even when the hypo gets into the film it does not immediately stop or check development, except so far as it gradually dissolves the unaltered silver bromide upon which the developer can act.

It is to this continued development that much of the trouble of stains in the fixing bath with bromide and gaslight prints must be attributed. An acid fixing bath is an immediate remedy, because the free acid which it contains is not only useful as an active preventer of stains, but also by neutralising the alkalinity of the developer, it at once stops its action. But, as we said above, this does not apply in the case of amidol, with which a plain hypo solution is what we prefer.

There are a number of formulæ for acid fixing baths, but the easiest way in which one can be made up is by the addition of a little potassium metabisulphite to a plain hypo solution. The exact quantity does not matter very much. A quarter of an ounce is sufficient for a pound of hypo, and if these two ingredients are dissolved in eighty ounces of water, we get an acid fixing bath which is of a strength of four ounces to the pint. This is a good all round strength for negatives and lantern slides, and may be used as it is, or diluted if preferred, for prints. Those who have not tried it should certainly do so.



The Week's Meetings

MONDAY, SEPTEMBER 28TH.

Glasgow Southern P.A. Ardlui.
 Bournville & D.P.S. Criticism Evening.
 Bedford C.C. Gaslight Printing
 Wallasey A.P.S. Members' Competition.

TUESDAY, SEPTEMBER 29TH.

Bristol P.C. Business Meeting.
 Nelson P.S. Cameras and Camera Work.
 Nelson C.C. "Lantern Slide Making." W. Harper.

WEDNESDAY, SEPTEMBER 30TH.

Everton C.C. "Enlarging." J. F. Wilde.
 North Middlesex P.S. Technical Meeting.

THURSDAY, OCTOBER 1ST.

Oliver Goldsmith P.S. General Meeting.

FRIDAY, OCTOBER 2ND.

Photo Art Club (Aberdeen). Annual Business Meeting.

SATURDAY, OCTOBER 3RD.

Attercliffe P.S. Ecclesall Wood.
 O'iver Goldsmith P.S. St. Mary Cray.
 Chelmsford P.S. The Walthams.
 Maidstone & Institute C.C. Eynsford.
 Borough Poly. P.S. Loughton.
 Govan C.C. Patterson.

MONDAY, OCTOBER 5TH.

Attercliffe P.S. Slide Making. G. Walton.
 Southampton C.C. Print Competition.
 South London P.S. "The Exhibition Picture." Rev. H. C. Fenton

Societies will have their meetings announced here if the syllabus is sent to us at the beginning of the Session, or from time to time.

Notes on Street Photography.

What to Take and How to Take It.

BY C. DAVIES. *Special to "Photography and Focus."*

LANDSCAPES, or perhaps it would be better to term them street pictures, are to be got in any town for those who can see them, and, seeing, can photograph them. The idea that it is only in certain highly favoured picturesque spots that work of this kind can be done successfully is a mistaken one. Cathedrals, sumptuous public buildings, and Norman archways are only to be photographed when they exist, and if they are not there the photographer must be content to do without them; but street groups and effects of light and shade are to be met with everywhere, and form the raw material from which the photographer can make pictorial work, the value and success of which will be in proportion to his own power and skill.

If the street possesses buildings of interest and beauty, then they may be employed to add value and importance to the photograph, but the mistake should not be made of thinking them necessities, and that without them the work must be poor. The trouble is that we are used to the street scenes that lie around us, and have got so used to them that we fail to note their charm.

How often does it happen that a photographer will have a day in some town he is visiting for the first time, and will get pictures which are better than those which have been got by workers who have lived in the town all their lives and have been able to select their time for taking any particular view? The outsider, coming fresh to the work, has seen things to which use and wont have blinded the others.

The technique of street photography is by no means as easy as it looks. The snap-shooter who has got on very well with landscapes, river scenes, and similar subjects will find that he has got a much knottier problem before him when he tries to work in a town. For one thing the streets are full of life and movement, and whereas he gave an instantaneous exposure of, say, a fiftieth of a second on a landscape because that was

all that it needed (not because there was anything in rapid motion), now he needs to give a fiftieth on account of the movement. Yet when he does so he will find his plate badly under-exposed. Exposure is one of the difficulties—in fact, the chief one. Most lenses likely to be used for this work have an aperture of $f/7$ or $f/8$ —in fact, except with a reflex camera, a lens with a larger aperture would have to be stopped down to this, or the chances are that the image would not be sharp. Now with $f/8$ and a very fast plate it is an exceptionally well lit street in very bright weather which is fully exposed with anything shorter than a twenty-fifth of a second, especially if there are any figures near the camera. In fact, a tenth of a second will usually be nearer the mark.

There are certain subjects to which this does not apply. A wet street with wide expanses of glistening pavement with reflections in it can be taken with a very short exposure. Now, some readers may think that I am wrong on this point, because in their own experience they have given shorter exposures with their shutters, and have got fully exposed plates; but I would remind them that, however accurate the slower speeds

may be, the highest speeds on many shutters are often quite mythical, and that one-twenty-fifth, one-fiftieth, and one-hundredth of a second are frequently all very much the same, that same being anything from one-twentieth to one-thirty-fifth of a second.

Granted, then, that from one-tenth to one-twenty-fifth is the exposure that is to be given if we want a fully exposed plate (and nothing else will give us a negative worth looking at), the difficulty arises how that exposure can be reconciled with the moving vehicles, people, etc. This can only be done by a judicious selection of the moment at which the exposure is made, and by careful arrangement of the subject also. Moving vehicles in the foreground should be avoided altogether. No exposure short enough to get them sharp will be long enough to get a fully exposed plate.



A RAINY SUNDAY AT THE BANK.

BY E. O. C. PUGH.

Awarded a Certificate in the Beginners' Competition for May.

The further off a vehicle is the smaller is its image on the plate, and the more it can move without that movement showing. The advice I have to offer, then, is to wait until it has got far enough to be very small and comparatively unimportant.

Another useful hint for street work is to choose a moment for exposure when there are comparatively few people about, if possible. The more moving figures there are, the greater is the risk that one or other of them will be caught in one of those "instantaneous" attitudes which look so unreal, and which inevitably attract the eye away from the real subject of the picture.

To get groups of people while they are unconscious of the camera, it must be as simple a form of apparatus as possible, inconspicuous, readily adjusted, and with a large finder, and one that does not compel the photographer to adopt any very out-of-the-way attitude, as if he has to do so he may say good-bye to all chances of getting his groups unconscious of the camera. All my own most successful work has been done with a box pattern camera with a finder of the ordinary "camera" pattern—that is to say, not a brilliant finder, and with extra rapid backed plates.

A pneumatic release is not required; it is much better to make the exposures by pressure with the finger. A good deal of quickness and decision is necessary if the best arrangements are not to be missed, and plates must not be spared. In a second or two what looks so well may be altered. The group may



A CITY GATEWAY.

BY EASTEN LEE.

Awarded a Certificate in the Advanced Workers' Competition for May.

have broken up or the principal figures moved so as to spoil the effect entirely. They should be photographed at once. On the other hand, the movement, instead of spoiling the group, may very greatly improve it, and if so, we must not hesitate to use another plate or several more plates on it. And here will be found the great advantage of a camera with a very rapid changing movement—one which allows a fresh plate to be put into position in an instant and without any fumbling. It has always seemed to me to be the greatest drawback of the otherwise excellent bag changing magazines—that it took even an expert user to change a plate in less than several seconds, and that



AN ANCIENT GATEWAY.

BY F. C. BOYES.

if the operation was in any way hurried the plate itself might be injured.

Contrary to what many might suppose, a bright sunny day is by no means the best for all sorts of street scenes, although for some effects sunshine is a necessity. The danger in a very sunny scene is that of getting one side of the picture all in shade and the other all in sunshine—a state of things which gives a lop-sided effect, which it is very difficult to counteract. In such a case it becomes important to



get some lights into the shadow side, and at least one strong

shadow on the bright side of the street. On a bright day, but one when there is no direct sunshine, but a strong diffused light, this difficulty does not arise.

In addition to street scenes of the ordinary type, there are a great many possibilities in street scenes at night. These are a little outside the subject of this article, but they ought to be mentioned amongst the opportunities which are at the command of the town dweller.

Personal Preferences.

BY HARRY GREENE. Special to "Photography and Focus."

IF LONG rather than short focus lenses are advocated by almost all the workers to whose authority we bow; yet my own favourite lens is one of barely 4in. focal length used on a quarter-plate, and I can give a reason for my preference, which is not altogether at variance with the dicta referred to. With so short a focus lens, many subjects are possible that could only be got with difficulty with a 5in. lens, perhaps not at all with one of 6in. or 7in.

On the other hand, as every quarter-plate picture which one values and appreciates is enlarged, there is no subject which can be got with the 6in. or 7in. lens that cannot be got equally well with the 4in. lens. It is only a case of remembering that the lens is essentially a wide-angle one, and that whenever circumstances allow the more distant standpoint, which with a long focus lens would be a matter of necessity, with a short focus lens it should be a matter of choice.

After all, it is not the fact that the lens is a wide-angle one that makes the perspective of the picture unpleasant, but the fact that it was used from an unsuitable standpoint. From the same standpoint all lenses give exactly the same perspective, differing only in the size of the objects on the plate, and therefore the amount of the subject that is got in.

With such a lens, remembering always to get as far away from the subject as will give the best effect, the picture with a given aperture is sharper than it would be if taken with a 6in. or 7in. lens; in other words, a bigger stop can be used, and so a shorter exposure. This is often a great advantage, especially in hand camera work, with street scenes, etc.

Finally, by knowing I have an ample margin all round the subject on the plate, any inaccuracy in the finder is unimportant, and no finder under all conditions is absolutely accurate. It allows the final disposition of the picture on the print to be made with much greater freedom than can be done when important

parts of the subject run close to the edges of the negative—a thing which they have a bad habit of doing, as every hand camera worker must have experienced. It is a great comfort to know that all the essential features of the picture are well on the plate, and that the trimming can be done precisely where it contributes most to the final result. Nothing is more objectionable

A PREFERENCE for which it is not so easy to find a reason is one for a finder of the "little camera" type. I mean one with a lens, a piece of mirror, and then a ground-glass on top. Most people, I fancy, prefer either the brilliant or the direct vision type; but the latter has always seemed to me to necessitate holding the camera in an inconvenient position, and one which does not suit all subjects, while the "brilliant" finder, although it enables the picture to be seen brightly, without any extraneous

WHILE the focal plane shutter seems to be the pattern most fancied by the enthusiastic hand camera worker, my own preference is all for a between-lens shutter, either with a single metal plate with an opening in it passing across the lens, as in the N. and G. hand cameras, or with a series of blades working on the iris principle. It has always seemed to me that the very high efficiency of some of these between-lens shutters is not appreciated by photographers as it might be.

Since, in most patterns, the maximum opening of the shutter is a fixed quantity, the iris diaphragm being independent (the Goerz Sector shutter is an exception to this rule), it follows that the more we stop down the more nearly does the efficiency of the shutter approach the ideal. The smaller the stop, the sooner is the lens completely open, and the longer does it remain open. It has always seemed to me that this is a very important feature for hand camera workers, because it means that they can at times stop down quite a lot, and yet get a fully exposed result. Efficiency of the shutter is less important when the lens can be used at a large aperture.

Then, again, when the shutter is one which opens and closes from the centre, and when the lens is being used with a large aperture, even if the shutter is not so efficient as it is when a small one is being used, we at least know that all that is lost in efficiency is gained in stopping down; and it is clear that, other things being equal, a shutter of this type, used with a lens at full aperture, must give a sharper picture than would a shutter fixed in front of or behind the lens. We know that so long as the lens has not been fully opened by the shutter it is practically stopped down, and whether the effect of that stopping down is noticeable or not, it is, at least, there.

One more reason can be adduced for my preference for the between-lens shutter of the diaphragm type, and that is that, owing to its design, there is no pattern made which has so little tendency to jar the camera during exposure. All the movement there is seems to be balanced. When one part of the shutter is travelling in one direction, a corresponding part will nearly always be found to be moving in the reverse way.

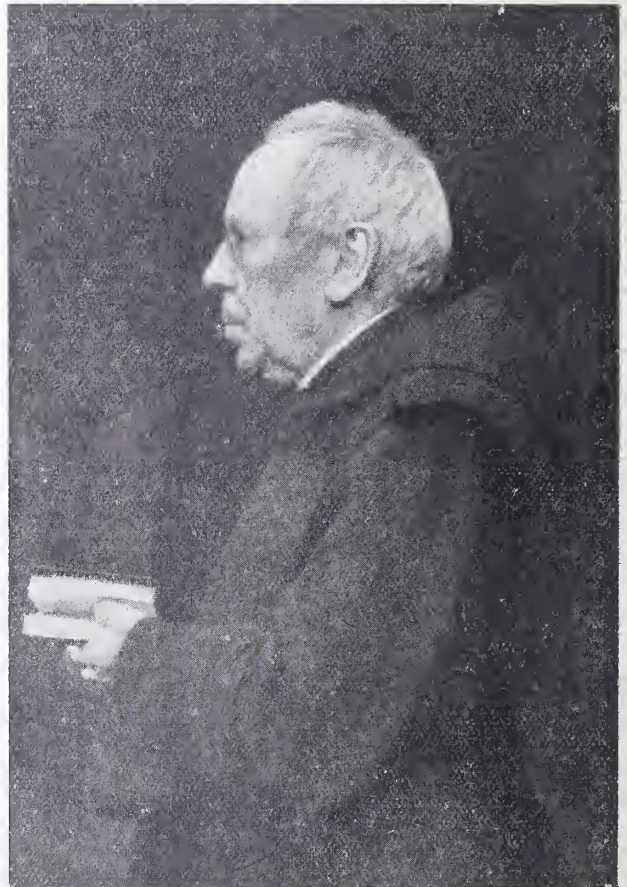
To see how true is this, all that is needed is to perch a hand camera with a shutter of this type on a pile of

than that suggestion which one sees so often in hand camera work, that the subject has only *just* been got on the plate, by the skin of the teeth as it were. If the lens is one of decidedly short focus and we make a point of trimming down its pictures liberally, the occasions when the picture is likely to suffer from this defect will be very rare.

shield, is at least, in my case, very prone to mislead as to the brightness and distinctness of the different objects in the view. They all look so clear and strong in the finder, only to appear dull and disappointing in the print.

I should like to add that I have always felt that the tendency in modern hand cameras is to make the finder far too small, and I would willingly sacrifice something in portability to get a finder with a ground-glass, say, $1\frac{3}{4}$ in. each way.

books or other very shaky support, and when it has ceased to shake to press the bulb. However flimsy the support of the camera, hardly any tremor will be noticed in it, whereas with most other patterns there will be a very perceptible shake. This is a good point, which is particularly valuable in the case of very light hand cameras, which are much more likely to be shaken than those of more weighty patterns.



PORTRAIT.

By WM. MACKRELL.

Awarded Second Prize in the Beginners' Competition for April.

IN spite of all that has been said about the superiority of comparatively slow plates over fast ones, my preference is for the most rapid of my favourite make that can be bought. In my own experience, I have not found that difficulty of getting density which is supposed to be the fault of very sensitive emulsions. In fact, it always seems to be quite easy to get all the density needed, and a great deal more. It is only a case of carrying on development far enough.

There are advantages in the use of very fast plates which do not need to be pointed out. But there is one which I may mention, which is a great one for those who like to watch the building up of density in the developer. The coating on slow landscape plates is often so opaque that this cannot be done, except in the earlier stages of development, in spite of the more powerful light which can be used with such slow plates. On the other hand, all the very fast plates I have used, although not so thinly coated as to give rise to any ill-effects, have enabled me to watch the

gradual acquisition of density right up to the finish, and to form a correct idea of the degree of contrast obtained.

Nor do very rapid plates seem to have any counterbalancing disadvantage in the shape of risk of fogging in the dark room light. With a proper "safe light," and not simply any bit of red glass that happens to be in the lantern when it is bought, fog from such a cause should be unknown.

So it will be seen that the price to be paid for always using very fast plates is a very low one; and in return for doing so there are distinct advantages in more ways than one. Most of all, of course, in the knowledge that however much the subject may require the shortest possible exposure, the photographer has prepared for it to the best of his ability. Most subjects for which slow plates are used can be dealt with almost as well with extra rapid plates, whatever may be written to the contrary; but with slow plates in the camera, many subjects are altogether barred.

THE choice of a developer, where there are so many claimants, all more or less good, will be settled by some very trifling matter. Conservatism is the best explanation I have to offer for my preference for pyro-metol. It was the first developer I used, and although I have tried others from time to time I have always been glad to get back to my first love.

The formula which I use is the well-known "Imperial" one, which may be repeated here for those who do not know of it:

Pyro	...	...	...	...	110	grains
Metol	...	...	...	...	90	grains
Potassium metabisulphite	...	...	...	...	$\frac{1}{2}$	ounce
Potassium bromide	...	...	...	...	40	grains
Water, to	...	...	...	...	1	quart

This is the A solution. The B is a solution of half a pound of sodium carbonate crystals in water to make one quart, and the developer for use is made by taking equal parts of A and B.

It may seem heresy to say so in the columns of *Photography and Focus*, but I hold the belief, based on several years' use of this developer for all kinds of instantaneous work, that it will make a better job of a

short exposure than any other that I have come across. Even when the negative is plainly under-exposed, the colour of the image which this solution gives seems to impart a wonderful printing value to the faint shadow detail, which it certainly would not possess if it were of the blue-black colour, which is all that can be obtained with some developers. Theory or no theory, I do not feel that I have made the most of a very short exposure if I have developed it with any other solution than the pyro-metol.

There is another feature about this developer which must not be passed over, and that is its keeping properties. Many developers will "keep"—that is to say, they can be used months and months after the stock solutions have been made up; but that is not quite what I mean. With almost all, they behave differently when old from what they do when new. But with this developer the action seems to be just the same, whether it is stale or fresh, so long as there is any left at all. I am inclined to put this down to the absence of any sodium sulphite in the B solution, as the gradual deterioration of this salt in solution is well known.

A Beginner's Paradox: Practice Making Imperfect.

IT is very difficult for the old hand to put himself into the position of one who is absolutely a beginner. Things which to him seem a matter of course and self-evident may be difficult and by no means so easy to understand when attempted for the first time. We have all been beginners, but many have forgotten the troubles which we then encountered, and perhaps overlook the fact that our own blunders may have been far more ridiculous than those at which we now feel tempted to smile.

It is a dangerous thing to laugh at the failures of the tyro. So easy are photographic operations now, that before many months are up he may be one of the most successful, judging the work perhaps of those who but a little time before were finding amusement in his early efforts.

The troubles of a beginner are often very easily explained. The processes he employs are simple enough. He reads the instructions carefully, makes up his solutions with the greatest accuracy he can command, starts off with everything fresh—new plates, new chemicals, new dishes—and gets a result, generally, which delights him.

Everyone must have noticed how often it is that the first results are good, while it is at the second and third that the trouble begins.

The reason for this is that the care which was exercised when all the processes were strange is sure to be relaxed when the operations are repeated, and the photographer is a little more familiar with them. He may not have learnt the lesson of chemical cleanliness. The dishes may have been dirty. Perhaps he does not realise that the mixed developer will not keep, and is trying to employ the same solution which developed his first plate so well a few days ago. The plates may not have been cared for properly and have got light fogged.

The first successful exposure was got by following some definite instructions, and instead of doing this on the second occasion an attempt may be made to repeat the first, overlooking the fact that the light may have changed, and other conditions may not be the same.

If all these minor points receive attention, and, above all, if familiarity with the processes is not allowed to breed contempt, but as much thought and care are given to the subsequent attempts as to the first, then there is no reason why one's photography should not be progressive right from the very first, instead of manifesting one more example of the paradox which has provided the writer with a headline for these notes.



HOW TO MAKE

A BACKGROUND FRAME.

By T. J. STORER.

HOW many amateurs who desire to do portrait work at home have left the subject alone more for the want of a suitable background than for any other reason? A background holder or frame such as professionals use is out of the question in most homes; so the only course that remains is to employ the strictly amateur pinned-up sheet or blanket, or to do without a background entirely. Dissatisfied with this method, I devised the frame described herewith. The chief advantage lies in the fact that when it is not in use it may be compactly tied together and stored away in some out-of-the-way corner or closet. Any background that will hang straight without need of being stretched may be hung on it; and even a sheet or blanket will behave itself better with this frame than when pinned on the wall. It is in the hope that it will help to solve the problem for others that I offer this description.

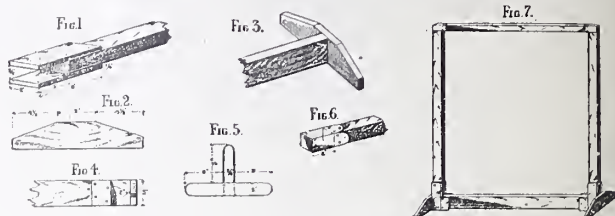
Almost any wood may be used in constructing the frame, but I recommend the use of yellow pine, being easily obtained, and at the same time one very well suited for such work. A list of the material required is given in the following memorandum. All pieces are to be dressed on all four sides to the dimensions given:

- One piece, $\frac{3}{4}$ in. \times 3 in., 5 ft. 4 in. long, for the base.
- Two pieces, $\frac{3}{4}$ in. \times 3 in., 12 in. long, for the ends of the base.
- Two pieces, $\frac{3}{4}$ in. \times 2 in., 5 ft. 9 in. long, for uprights.
- One piece, $\frac{3}{4}$ in. \times 1 in., 5 ft. long, for the top piece.
- Four pieces, $\frac{1}{4}$ in. \times 2 in., 6 in. long, for the ends of the uprights.

Four pieces, $\frac{1}{4}$ in. \times 1 in., 3 in., for the studs on the base.

A little care will have to be exercised in nailing the frame together, as it is essential that all the joints should be tight fitting to secure rigidity.

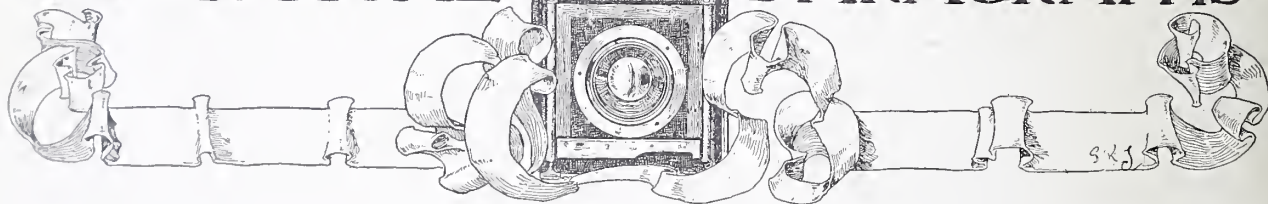
First, two of the 2 \times 6 pieces of the $\frac{1}{4}$ in. stuff are taken and nailed on to the end of one of the 5 ft. 9 in. pieces, as



shown in fig. 1. The same is done with the other two small pieces on the other upright. Then the two 12 in. pieces are cut in the form shown in fig. 2, and fastened to the end of the 3 in. base piece in the manner shown in fig. 3, using 3 in. wood screws. The four 1 in. \times 3 in. pieces of $\frac{1}{4}$ in. stuff are now to be fastened to the sides of the base piece, parallel with and at a distance of 2 in. from the end of it. This forms a slot to receive the pieces previously nailed to the ends of the uprights; and to secure a rigid frame it is essential that this joint be accurately put together.

A piece of tolerably thin tin or brass must next be procured and two pieces of the pattern and dimensions shown in fig. 5 cut out. These are to be bent as shown, and nailed to the ends of the 5 ft. piece, forming two pockets that will fit over the tops of the uprights. The frame is now complete so far as construction work is concerned, and may be fitted together as shown in the sketch of the completed figure. A coat of paint will materially improve its appearance and durability. ("Camera Craft.")

PRACTICAL PARAGRAPHS



A CAUSE OF BROKEN NEGATIVES.

If a printing frame has been put aside for a few months it should not be brought again into active service without being very carefully examined to see if it has warped. To do this, it should be laid face downwards on the table and the back removed. A negative should be laid in it, taking care that there is no dirt on the rebate of the frame, and then each corner of the negative in succession should be touched with the finger to see if it is resting on the frame, or if there is any "wobble." If the latter, the best thing to be done is to put the frame on the fire. It may be said that this is a wasteful process, and that the warp may be counteracted by packing with paper or card, but the photographer who values his negatives will prefer to run no risks. It is hardly possible to pack the rebate so as to remove all chance of damage, and it always seems to be the valuable negatives which are broken from this cause. More than one negative should be tried in the frame before deciding to use it, as negative glass itself is not always flat. The worst of a warped frame is that one may never know it is warped until it has done the mischief; it is usually some time after putting a negative out to print that it is found to be cracked.

COATING GUM BICHROMATE PAPER.

A writer in "Camera Craft" states that in casting about for some means of coating gum bichromate paper with the pigmented gum solution in such a way as to avoid any brush marks, he was led to try the air brush. The tip of the brush was slightly altered to allow for the glutinous nature of the solution; and the experiment then proved to be an unqualified success. The pigmented gum solution falling on the paper in the form of a fine spray dried almost instantly. The paper, therefore, is ready for printing at once. The less exposed portions of the print wash out easily without friction, and wash out to their proportional depth—a thing that does not always happen when the coating has been applied with an ordinary brush and given an opportunity of soaking into the paper. The method of working was, first, to sensitise the paper in a solution made by dissolving 250 grains of potassium bichromate in six ounces of water. This is done by a yellow light, and the paper is dried in the dark. When bone dry, it is coated with a mixture of equal parts of gum and pigment solutions. The gum solution is made by allowing ninety grains of gum arabic to dissolve in an ounce of water. The pigment solution is made, approximately, to the same strength.

HOLIDAY INFORMATION.

BOGNOR.

I should be much obliged if amongst your holiday information you could deal with Bognor.—H. J. CHAPMAN.

The surroundings of Bognor will be found to appeal to the pictorial worker, for within easy reach of it are a number of very picturesque villages, while the cathedral city of Chichester can be reached by train or motor bus. Chichester alone offers many opportunities of work, not only in the cathedral, though this will employ a great many plates. Arundel, the seat of the Duke of Norfolk, opens up another field for the architectural worker, and Goodwood, the Duke of Richmond's place, with its lovely park, is also well worth a visit.

The old-world fishing village of Selsey provides opportunities of work of another character. Some fine models for portrait work, too, are to be found in Bognor itself, amongst the fishermen, and with a little gentle persuasion can be got to face the camera.

Accommodation is plentiful and reasonable in price, except on the sea front. Photographic materials can be obtained from Mr. E. Laurence Wood, of the Royal Library, High Street, who keeps a good stock, and has also two dark rooms, one for plate changing and one for developing.

ALFRETON.

Any particulars you can give as to the photographic possibilities of Alfreton in Derbyshire and its neighbourhood would be welcome.—SYNTOB.

Alfreton is an ancient little town in the midst of very beautiful scenery and places of historic interest. It is a hundred and forty miles from London, and takes its name from King Alfred, (Alfred's Town) who is said to have hid himself there when pursued by the Danes.

There are several good hotels, the Station, George; Four Horseshoes, and Abbot's Temperance Hotel; a bus from the George (fare 3d.) meeting all trains (Midland Railway). Hotel charges are very moderate. Mr. A. E. Houghton, chemist, Church Street, holds a large stock of photographic materials, and provides a dark room for the use of customers and visitors.

In Alfreton itself are the parish church, which makes a good picture taken from the churchyard gates, and the old-fashioned prison, known locally as the "Stone Jug." Alfreton Hall and Park also should not be missed, providing subjects for about a dozen plates. Two miles away lies South Wingfield. Here are the ruins of an ancient manor house, built in the reign of Henry IV. In 1569 Mary Queen of Scots was a prisoner here in care of the Earl of Shrewsbury. An underground passage from the Manor to the Peacock Hotel at Oakerthorpe, a mile away, is said still to exist. This Peacock Hotel, a relic of the old coaching days, is itself well worth a plate or two. At the village of Higham, a couple of miles from Alfreton, is a market cross, while

many old-fashioned cottages are to be found there. Ogston Hall here, mentioned in Domesday Book, is worth three or four plates.

Hardwick Hall, "more glass than wall," one of the seats of the Duke of Devonshire, is seven and a half miles from Alfreton. It is a fine Elizabethan mansion, which should be visited. The park contains deer, which may be snapshotted. On the way back Hardstoft should not be missed, a place at which village pictures may be got. Crich Stand (five miles from Alfreton), a famous landmark on the summit of a hill, was formerly used as a watch tower. It is rumoured that this relic of the past is in a dangerous condition, and is about to be removed.

Any photographer visiting the Alfreton district will find himself amply repaid for the visit by the many and varied opportunities for picture making which it offers.—A. BONSALE.

GRAVESEND.

What are the possibilities of Gravesend as a photographic centre?—W.W.W.

Gravesend is distant from London twenty-four miles by rail, twenty-six by water; the ordinary fare is 3s. return, but there are six or eight cheap trains daily, by which the fare from London Bridge or Charing Cross is 1s. 6d. return.

The old church, St. George's, built about 1733, is quaint and interesting. It contains a tablet erected to the memory of Princess Pocahontas, a Red Indian maiden who married an Englishman whose life she was said to have saved, and died at Gravesend. Round the old church will be found some quaint alleys and passages, leading down to West Street, at one end of which latter is the pier.

The pier is a capital place for ship-ping studies. Hundreds of vessels of all kinds pass it; barges, trawlers, steamers large and small, up to fine ocean-going liners, all go by within reach of the lens. If barge pictures are wanted, the ferry boat may be taken across the river to the Tilbury landing stage. From this point, also, we can get some fine sunset effects, as well as the shipping.

Cobham is easily reached from Gravesend. At the top of High Street a tram is taken up Windmill Street to the Old Prince of Orange. Cobham is about an hour's walk from here, passing through the little village of Singlewell, where there are one or two quaint corners well worth a plate. In Cobham village is the Leather Bottle mentioned by Dickens in "Pickwick Papers." Immediately opposite is the fine old church, which contains many brasses and effigies.

Just behind the church at Cobham are the almshouses, known as "The College," with some very effective doorways, porches, etc., and inhabitants who will be found to make good models. There is a charge of 6d. for photographing here, and it is well worth it. A quarter of an hour's walk brings us to Cobham Woods, a fine place for woodland pictures; permission to photograph must be obtained beforehand from the estate agent.

The return from Cobham Woods may be made through the village of Thong, where is some fine open landscape scenery. The next village is Chalk, a mile and a half from Gravesend. On the right beyond here is Old Milton Church, a fine building with a grand sundial on the porch. If time permits a tram can be taken from here to the Leather Bottle at Northfleet. On leaving the car we ask for Springhead Marshes, about twenty minutes' walk away. Here are good landscapes of backwater, marsh, willows, etc.

A great deal more could be written about Gravesend as a photographic centre, as the possibilities of work here are by no means exhausted in the above list.

Darkrooms are to be found at the establishments of Mr. Moore, chemist, New Road; Messrs. Perry and Sons, High Street; and Mr. Moore, chemist, Windmill Street.—FELICIS.



Substitute for Retouching Medium.

If a negative needs a great deal of retouching it will be found that the ordinary retouching medium will not carry all the lead that is to be applied. Under these circumstances the surface of the gelatine itself may be roughened, and the pencil applied to that. Powdered cuttle-fish bone may be used by itself, but a better result can be got by mixing

Powdered cuttle-fish bone 2 parts
Finely powdered resin ... 1 part

The two are incorporated by being sifted together in a very fine hair sieve. A little of the powder may be placed on the parts to be roughened and rubbed round with the tip of the finger.

For Sensitising Postcards.

The following solution may be brushed on to the cards, using a brush without any metal in it:

Silver nitrate ... 45 grains
Uranium nitrate ... 450 grains
Distilled water ... 1 ounce
Alcohol ... 4 ounces

The cards should be well sized, and after printing out by daylight they are fixed by immersion in hydrochloric acid 1 drachm, water 10 ounces, washed and dried. The image given is of a brown colour. (Sollet.)

A Mountant.

A gum mountant which is said not to cockle prints so much as the ordinary starch paste is the following:

Gum arabic ... 2 ounces
Glycerine ... ½ ounce
Alcohol ... 1½ ounces
Water to ... 8 ounces

The gum is first dissolved in four ounces of water, and then the glycerine is added. The alcohol is next poured in, with constant stirring, and finally the bulk is made up to eight ounces with water.

HOW I MAKE MY CAMERA PAY

By L.S. Brown
Special to Photography & Focus

ONE OF A SERIES OF
ARTICLES SHOWING HOW
EVERY AMATEUR MAY
RECOUP AT LEAST SOME
OF HIS OUTLAY

R

EPRODUCED on this page is a little print, "Snails Dragging a Two-pound Weight"—not a very good photograph (one of the snails has "moved"!), and in many respects a

production I am ashamed to acknowledge; but I have chosen it to illustrate this article because—well, because it exactly *does* illustrate it.

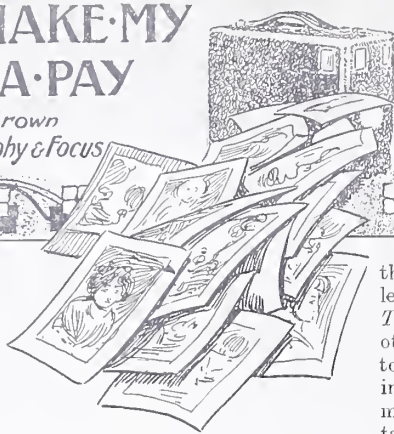
The history of the photograph is this: Happening to visit a French family one day, I heard that the children had been amusing themselves by "harnessing" common garden snails to a toy carriage, and, to everybody's surprise, had proved that the snails were able by suction-power to haul not only the carriage, but a kilo weight placed upon it. I got the children to demonstrate their experiment before my camera, the car and snails being placed on paper as a background, and presently I was several half-guineas the richer by selling prints of the picture to various journals from the "Daily Mail" to the "Sketch."

That is the whole truth about this rather feeble picture, except that I afterwards discovered that one of the members of this family possessed a camera, and might just as well have taken the snail picture himself and pocketed the half-guineas. Herein lies the moral. I knew what he didn't know, and I profited accordingly.

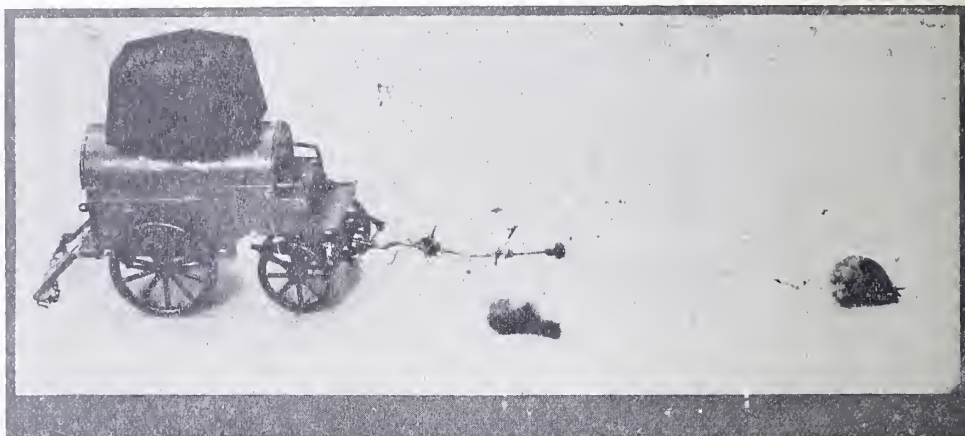
I don't mean that I knew the editors who bought my prints. I had never met any of them. But I knew what they wanted in the illustration line, not because they had told me, but because the pages of their journals told me. They wanted "curiosities," and this fact about the power of snails was a curiosity. Had I been a scientific naturalist, the muscularity of the snails would not have astonished me, and would not have been new to me. But I am not a naturalist, and I guess that the average editor isn't a naturalist either. Precisely because I am an ordinary "man in the street" I was able to see that this picture would be a "curiosity" to other men in the street—that is, to the buyers of the magazine—and therefore to the editors of the magazines.

In other words, you don't need to be a "specialist" of any sort to contribute to the popular papers; on the contrary, a mere typical member of the public (like myself) is often a far keener judge of the journalistic value of a subject than a wiseacre whose speciality that subject is. It sounds cynical to say so, but what one may call "intelligent ignorance" of a subject is sometimes quite an asset to the would-be press photographer.

From time to time I hope in the pages of *Photography and Focus* to publish some notes under the title, "How I Make my Camera Pay." And the reason I have begun by showing



this snail photograph is because it, so to speak, lets the cat out of the bag at the very outset. This is how I make my camera pay—this and other photographs like it. For I am not going to preach about the possibilities of photographing Royal processions and openings of Parliament and society weddings (at least I shall not talk about these things yet, though at some future date I may do so). I am no believer in telling the amateur photographer to tackle professional photographers' jobs. My thesis is that the amateur photographer, while remaining an amateur, and while owning no specially fine apparatus, can still at the very least clear the expenses of his hobby, and probably put a few pounds into his purse over



Snails Dragging a Two-pound Weight.

and above as profit. This has been pointed out repeatedly before now; but to my mind the pointing out has been done in too vague and general a way.

Amateur photographers have been informed, categorically, that they can make cash with their cameras, but when the amateur asks "How?" he is given precept (that always plentiful commodity!) without practice. My remedy for this state of affairs may seem a garrulous one, but I believe it will prove sound in the long run: it is to be autobiographical.

I make my camera pay, and I shall tell you how I do it. I shall illustrate with pictures which I myself have taken, and which I myself have sold, and I shall tell you their story and mine. Maybe (as above) I shall be unable to resist the temptation to draw a moral and sandwich in a word or two of advice; but I hope both moral and advice will be helpful. And if there is an overplusage of the first person singular in my articles, please forgive; for I am following editorial commands.

Said our editor: "You tell me that you make some fifty pounds a year or thereabouts by selling prints to the press, yet I know you are a genuine amateur, and are busy with work other than photography. Write down a plain statement of how you make that fifty pounds, so that my readers may have the benefit of your experience, and may go and do likewise."

I agreed. From which it may be deduced that I am not afraid of competition. This is not because I think I can take

better press pictures than the readers of *Photography and Focus*, but because there is really no such thing as competition in the type of press photography of which I shall speak. There is plenty of room for all, in amateur press photography, whatever there may be in professional press photography. The latter is another *galère* altogether; and far be it from me to tempt any blameless innocent to adopt it as his means of bread-winning.

This week's article is more or less introductory—the cackle preceding the 'osses—but the snail tale may serve as text for two or three hints before I close.

First: Keep your ears open even more than your eyes. I heard of the snails before I saw them; in fact, I should never have seen them at all if I had not insisted. Second: Don't worry because you have never met an editor, or don't live in London, and therefore cannot perambulate Fleet Street with your work. Photographs can reach an editor as safely

through the post as by hand, and you can learn exactly what sort of photograph he wants by studying his paper in a free library. Third: Never mind if the photograph is poor, technically (unless you can get another better exposure), provided it is (a) remarkable enough to be worth submitting at all, and (b) tells its story with reasonable clearness. "Our artist" in the editorial office and the block-making room will fake it up into respectability if there is any image on the print—and sometimes if there is none. Fourth: If necessary, write a few words of explanation on the back of the print when you submit it, in addition to its title and your name and address. This picture, for example, would not have been at all obvious without a little paragraph saying what the snails were doing, and dwelling with emphasis on the weight they were pulling.

But on the delicate topic of "approaching editors" I shall have more to say at a later date.



The Advanced Workers' Competition for August. Awards.

IT came as a surprise to us to find that, in spite of August being *par excellence* the holiday month, the entries in the Advanced Workers' Competition showed a great advance upon those for July, not only in numbers, but also in quality. Owing to holidays on our staff and other causes, there will be a little delay in returning the prints to the senders; but we are anxious to maintain the reputation for promptitude enjoyed by *Photography and Focus*, and shall leave no stone unturned to get all sent off by the end of the month.

The full list of the awards in this competition is as follows:

Awards.

- SILVER PLAQUE.—"A Peaceful Evening." By Francis A. Tinker, 43, Firth Park Road, Sheffield.
 BRONZE PLAQUE.—"An Old Archway, Bruges." By Edwin Marks, Copeland Street, Stoke-on-Trent.
 BRONZE MEDAL.—"The Clump of Trees." By Sydney H. Carr, Arkleby, St. Ives, Cornwall.
 CERTIFICATES.—"When Woods were Green." By A. W. Walburn, Upper Park Road, West Hartlepool.—"Sansie." By Alfred J. Loughton, Market Place, Southwell, Notts.—"The Prentice." By Alfred Bracewell, 20, Heaton Grove, Frizinghall, Bradford.

The Special Subject Competition. Harvest. Awards.

ENTRIES for the "Harvest Scene" competition were numerous, but we are sorry to note that the average of quality was quite exceptionally low for these competitions. Whether it was that the closing date fell too soon for securing harvest pictures, or whether the more skilful competitors were away holiday making, we cannot say, but we went through hundreds of prints before we found one which was up to the standard of previous special subject competitions. The prevailing faults were the introduction of too many figures and their obvious consciousness of the camera. One entry which caught our eye had sixteen figures in it, all of almost equal prominence, and

all standing still and staring straight into the camera. Another one we note has nine such figures. Even when the number is small, the figures are often competing with each other for attention, and in many cases are only too clearly waiting to be photographed.

Awards.

- Silver Plaque.—Withheld.
 Bronze Plaque.—T. M. Parker, 18, Blythwood Road, Crouch Hill, London, N.
 Bronze Medal.—"Early Aster," by Joseph Clegg, 34, Birkdale Street, Cheetham Hill, Manchester.

The Beginners' Competition for August. Awards.

THE low standard attained in the Special Subject Competition was very far from the case of the Beginners' Competition this month. Never since these Beginners' Competitions started have we had so many entries, and certainly we have never had so many good ones, as on the present occasion. Figure studies and groups, mostly with children as the models, formed the subjects with which our readers had dealt most successfully; and the judging amongst so many excellent photographs was particularly difficult. The landscape work, although good on the whole, was not so noticeably in advance of that sent in on former occasions. As was to be expected, a very large proportion indeed of the total entries consisted of holiday snap shots, many of them being excellent examples of their class. In consequence of the high average of merit which this competition reached, we have awarded an extra first prize to take the place of the

silver plaque which was withheld in the Advanced Workers' Competition this month.

Awards.

- FIRST PRIZE (a signed copy of "The Complete Photographer").—Harry L. Burford, 30, Moreton Place, Belgrave Road, S.W., for "Busy"; and D. Kay, 150, Cambridge Drive, Glasgow, for "Hazy Morning on the Clyde."
 SECOND PRIZE (a free subscription to *Photography and Focus* for one year).—W. D. G. Day, 2, Brook Street, Grandpont, Oxford, for "A Little Waif."
 CERTIFICATES.—Mathias Parker, 16, Pendennis Street, Anfield, Liverpool, for "The Humorous Picture"; John Liversidge, 83, South Street, Huddersfield, for "Marbles"; and J. S. Lakin, 21, Park Road, Carr Lane, Shipley, Yorks., for "The Old-fashioned Way."

Passe-partout Framing.

By W. H. Alexander. Special to "Photography and Focus."

ECONOMICAL AND MOST EFFECTIVE.

PASSE - PARTOUT may fairly be regarded as an English word, and its claims are the stronger, as there is no other term synonymous with it to take its place. For the benefit of those who are quite unfamiliar with it, I would point out that a passe-partout is a protection or mount for a picture, made by binding the card and glass together at the edges with some

adhesive material, no wooden "frame" being used at all.

The simplicity of the passe-partout is one of its strongest recommendations. Properly made, there is no fear of it being more prominent and assertive than the picture itself, as so often happens in the case of photographs framed in wooden mouldings. It is extremely cheap also, since beyond the glass itself there is really nothing to cost any money at all. The passe-partout, being only a little thicker than the glass, takes up very little room, so that it is compact and handy if it has to be sent any distance. Lastly, in this string of advantages comes the matter of its artistic adaptability or flexibility, which allows infinite scope to the taste and skill of its maker.

We speak of passe-partout "framing" as a convenient means of expression, but in the strictest sense it is not framing at all, since there is no frame. The glass merely bears a small neat border of paper or fabric, finishing off its edges and holding the cardboard backing to it. As there is no wood or anything into which screws can be driven, the rings for hanging up the passe-partout are usually attached by means of strips of tape glued to the back card.

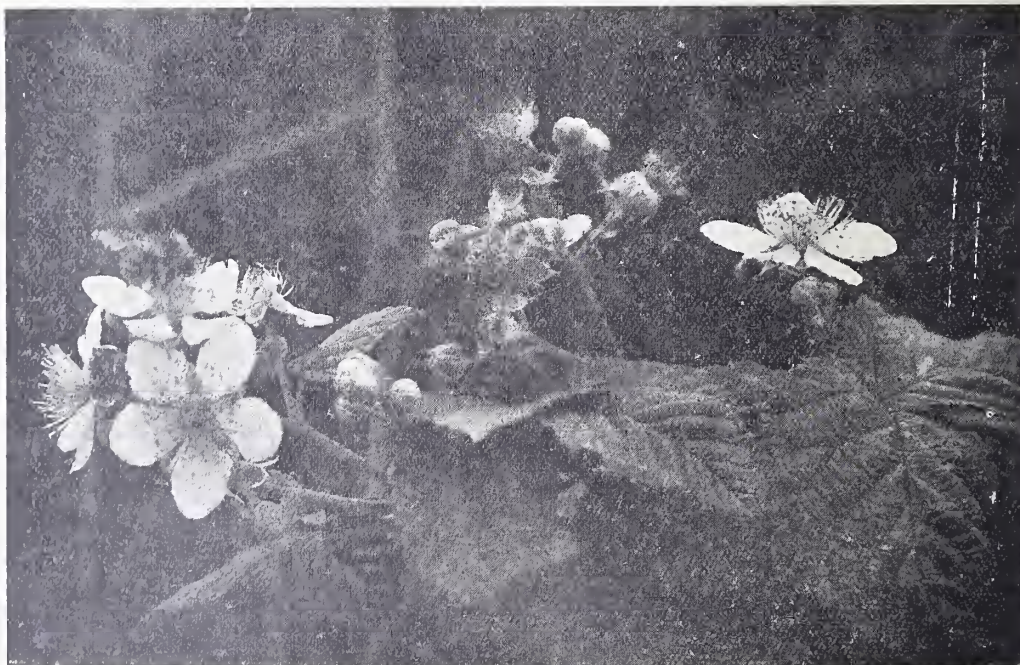
To come to the actual making of a passe-partout, it may be said that the greater part of its success or failure depends upon the taste exercised in the selection of the mount and binding material. Photographs to be shown in this style should not be mounted close up, as the effect is not good; there

should be an ample margin all round them, and if this margin is built up of several different papers, in what is called the American style, so much the better. The first stage of the process then is the mounting of the print itself.

At one time, photographers who wanted "art" papers for mounting had to depend on chance finds of wrapping and cover papers for their supplies, but there are now quite a number of houses making a speciality of such materials. A good supply of different tints should be got, so as to leave one's selection untrammelled. The tints should be as closely resembling one another as possible; in fact, what is wanted is not so much papers of different colours as papers of different depths of the same colour. When a print so mounted fails, it is nearly always from the strongly-marked differences between the different mounts.

The print is trimmed, and then is laid upon the mounting papers, so as to form some general idea of the arrangement which will best suit it. There is no need to cut up the papers at this stage; one corner of the print may be used for the trials, putting it on one corner of the various sheets of mounts until an effective result is secured. A piece of the innermost mounting paper is then taken, cut a little larger in each dimension than it is to be when finished, and with the slightest touch of gum or seccotine on its two top corners, the print is put on it and placed under pressure for a few minutes.

When it has fairly stuck, thin lines are drawn on the face of the mount, with the aid of a strip of paper, a finely-pointed pencil, and a ruler, showing where it is to be trimmed off. As a general rule, it will be found best to make the margins at the top and sides equal, but to make the margin at the bottom considerably wider. There may be exceptions to the first part of this rule, but the second seems to admit



Blackberry Blossom.

[By F. G. Spinks.]

of none. If the margin at the bottom is the same as at the top and sides, it will actually look much smaller, and the general effect will be as if the print had slipped down.

Having marked the mount, we next proceed to cut it, so that the pencil lines are *just* trimmed off. The best way of doing this, beyond all question, is with one of the guillotine print trimmers, of which so many patterns are now on sale; but as some of the mounts will be much larger than the largest of the prints, a large and comparatively expensive machine will be wanted. The amateur may feel that he is hardly justified in getting one, where he has so little trimming to do, and will most likely want to do his cutting with a knife in the ordinary way. A sharp pocket-knife and a steel straight-edge are all that are required, cutting on a piece of stout cardboard, which certainly blunts the tip of the knife very quickly, but does not turn it over and spoil it altogether, as trimming on a sheet of glass soon does.

When the first mounting paper has been cut to size, the second piece is selected, also a little larger than it is to be when finished, and the first is attached to it by its two top corners, in exactly the same way as before. These operations are repeated until the mounting is finished. It is necessary to complete the mounting first, because in every well-designed passe-partout the narrow edge of binding material on the glass must be selected to harmonise with and, in fact, to form part of the general scheme of mounting itself. Unless the outermost mount is very light in colour, a very simple and neat finish can be given by using paper of exactly the same colour and depth for the binders.

Four strips of this paper are cut, taking care that one edge at least is perfectly straight and smooth. Two should be a little longer and two a little wider than the glass. The breadth of the strips may be anything from an inch to three or four inches. Two of the strips that are the same length are damped to allow the paper to expand a little, and after the lapse of a minute one is gummed, taking great care not to get any gum on the other side of it, and is laid gummed side up on the table. The glass is then laid carefully down on it, so that the edge of the paper is exactly parallel with the edge of the glass, about a quarter of an inch, more or less, of the paper being in contact with the glass. On picking the latter up, the paper will come up with it, and should be gently smoothed and pressed into contact with the fingers. After the lapse of a few minutes a strip may be applied to the opposite edge in the same way. The ends of these strips must be cut off fair and square with the ends of the glass,



Eventide.

By R. Stewart.

and then two other strips also cut to exactly the length of the glass are applied to the other two edges. The strips look neater allowed to overlap at the corners than they do if any attempt is made to mitre them. The most important points at this stage are to keep the adhesive off the face of the strips, and to keep the breadth of that part of each strip which is stuck on the glass the same. The glass, with the strips on it, should be laid aside on a smooth surface, strips downward, to get thoroughly dry, which it must do before the next stage.

When the gum is quite dry, the glass on the opposite side to the strips is cleaned carefully. The cardboard backing, which must be the exact size of the glass, is laid on the table, the mounted print is placed on it, and the glass on top of all. Then the whole pile is turned upside down, and the strips, where they project beyond the glass, are gummed and left until the gum has made them quite limp, when they are bent round and stuck firmly down to the card at the back. The passe-partout should not be lifted up at this stage, but left just where it is to dry, with a slight weight

of some kind to press the strips into contact with the card. When dry, all that has to be done is to clean the front of the glass, and the passe-partout is finished.

For hanging up pictures "framed" in this way, special hangers may be bought from stationers who specialise in passe-partout materials. They are not necessary, however. Two slits the width of a tape may be made in the cardboard backing before fastening up the passe-partout, and into each slit may be pushed the ends of a loop of tape an inch and a half long. On the loop may be threaded a brass ring. The tape is gummed firmly down to the card, on the side which is to form the inside of the passe-partout, passing out through the slits. This makes a very neat job of the arrangements for hanging, and is very strong.

When this has been done the passe-partout will be finished. In careless hands this method of "framing" may look poor and untidy, but if a little thought is given to the selection of suitable tints of paper, and a little time and trouble are expended to make the result as good as it can be made, there is no more effective way of displaying a print. It is particularly useful when the photographs are required temporarily, for exhibition. The expense of frames under such circumstances would not be justified, especially if there were no room or no use for them afterwards. The passe-partout solves the difficulty, and solves it well. It allows even more room for the display of good taste than does the wooden frame, while when the exhibition is over the photographer can take his prints out and put them back in his portfolio, and, if he feels inclined to, he may throw the passe-partouts away, without feeling that he is at all wasteful.



IN THE LAND OF FAR AWAY.

Awarded a Certificate in the March Competition.

BY IRENE E. HOW.

The growth in the popularity of the passe-partout is well shown by recent exhibitions. Even such important shows as those of the Royal Photographic Society and the Salon have contained a large number of pictures framed in this inexpensive but effective manner, while, at the Salon in particular, some of the American exhibits have been object lessons on what can be done in this direction with such simple materials as a few sheets of mounting paper or card and a piece of glass.

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PROFESSIONAL AND TRADE.—Three words—d., minimum 1/-.

All advertisements to be inserted on these terms must be accompanied with remittance. To ensure insertion, letters should be posted in time to reach the offices, 20, Tudor Street, E.C., not later than first post on Wednesday.

BOX NUMBERS.—For the convenience of advertisers, letters may be addressed to numbers at the office of the paper. When this is desired, 2d. will be charged for registration, and three stamped and addressed envelopes must be sent for forwarding replies. Only the number will appear in the advertisement. Replies should be addressed: "No. 000, c/o PHOTOGRAPHY AND FOCUS, 20, Tudor Street, London, E.C."

DEPOSIT SYSTEM.—Persons who hesitate to send money to unknown persons may deal in perfect safety by availing themselves of our Deposit System. If the money be deposited with PHOTOGRAPHY AND FOCUS, both parties are advised of this receipt, and upon intimation of the arrival and acceptance of the goods, the money is forwarded, less a charge of 1/- for registration. The time allowed for a decision after receipt of the goods is three days. For all transactions exceeding £10 in value, a deposit fee of 2/6 is charged. Cheques and Money Orders should be made payable to the Proprietors, MESSRS. LILFEE AND SONS LIMITED, and addressed to them at Coventry.

PUBLISHING NOTICE.—Communications for the Publishers should be addressed: LILFEE AND SONS LIMITED, 20, Tudor Street, London, E.C.

EDITORIAL NOTICES.

ADDRESS.—All communications for the Editor should be addressed: The Editor, PHOTOGRAPHY AND FOCUS, 20, Tudor Street, London, E.C.

TO CONTRIBUTORS.—The Editor will be glad to consider original up-to-date manuscripts on photographic subjects. All contributions must be typewritten, or in very legible handwriting, on one side of the paper only, and should bear the name and address of the sender. Letters or communications arising out of matters already appearing in the paper are not paid for. The Editor disclaims legal responsibility for the safety of matter submitted to him, but he will endeavour to return rejected manuscripts, etc., when a stamped addressed envelope is enclosed for that purpose. No notice whatever can be paid to communications without the name and address of the sender, not necessarily for publication.

PRINTS FOR CRITICISM.—Readers sending prints for criticism or advice are notified that in all cases it is understood that by so doing permission is given for their reproduction, without fee, in PHOTOGRAPHY AND FOCUS.

PRINTS FOR REPRODUCTION.—Reproduction fees are only paid by arrangement beforehand. The sending of a print, without any condition stated, will be taken as permission to reproduce it without fee. The Editor will be glad to consider for publication, with or without letterpress, photographs of special interest, on terms to be arranged.

PAYMENTS.—Articles and illustrations are paid for on acceptance.

INTERVIEWS.—The Editor will be at 20, Tudor Street, on Wednesdays, between the hours of 9.30 and 11.30 a.m., but can only be seen at other times by appointment.



PHOTOGRAPHY IN WINDSOR PARK is only allowed by special permission of the Ranger, but permits, subject to the observance of the park regulations, can usually be obtained on application to the Deputy Ranger, Holly Grove, Windsor Park.

STEREOSCOPIC TRANSPARENCIES OF THE "WHITE CITY." The Gaumont Co. have produced a series of twenty of these 45 by 107 mm. in size, which are on sale and can be seen at their show-rooms, 5 and 6, Sherwood Street, Piccadilly, London, W.

CHRISTMAS POSTCARDS. The Birmingham Photographic Co., Ltd., sends us some specimens of the sensitive postcards of various kinds, with special designs upon them to fit them to serve as Christmas cards. The designs are pleasant and in very good taste, and the cards themselves will doubtless find a ready sale.

Books for . . . Photographers.

Photography for All.

By W. JEROME HARRISON, F.C.S.
Covers the whole ground of photography as practised in its most popular forms.
Cloth Bound 1/- nett. Post free 1/2.

Practical Slide Making.

By G. T. HARRIS, F.R.P.S.
All the different processes described at first hand by a practical slide maker.
Cloth Bound, Price 1/- nett. Post free 1/2.

The Hand Camera and what to do with it.

By W. L. F. WASTELL AND R. CHILD BAYLEY.
Dealing with modern hand cameras of all types and giving instructions for all forms of photographic work involving the use of a hand camera.
Cloth Bound 1/- nett. Post free 1/2.

The Platinotype Process.

By W. J. WARREN.
A complete, practical, concise and well written treatise on what is the finest of the printing methods of pure photography, with facsimile developed and undeveloped platinum print.
Cloth Bound 1/- nett. Post free 1/2.

Photographic Recipes and Formulæ.

By R. PENLAKE.
Over 300 Formulæ, Hints, etc. Reliable and up-to-date.
6d. nett. Post free 7d.

A full list sent on receipt of a postcard.
LILFEE & SONS LTD.,
20, TUDOR ST., LONDON, E.C.

MESSRS. R. AND J. BECK, of 68, Cornhill, London, E.C., ask us to draw attention to the fact that their special offer of the new series of the Isostigmat lens, at f/4.5, at reduced prices, will only be open during the current month, September.

THE RAJAR CAMERA offered monthly for the best print on "Rajar P.O.P." has been won by D. Abrahamse, of 49, Chapel Street, Cape Town, S.A. The paper was purchased from E. H. Oakley and Co., of Adderley Street, Cape Town.

THE OKRO COMPETITION. Results have now been issued by Messrs. Rae, Ltd. The first prize is taken by Robert Burnie, of 86, Woodlands Road, Glasgow; the second by G. Anderson, 77, Braeside Street, Glasgow; and the third by Peter Orr, 3, Alexandria Terrace, Govan.

SPIRIT PHOTOGRAPHY is having the attention of our contemporary "John Bull," and the latest proposition is an expert committee of photographers to "settle the burning question of spirit photography." Unfortunately no committee could by any possibility be formed which would have the confidence of both spiritualists and photographers, while the subject is certainly not "a burning question." It will not even simmer.

WHAT IS IT? A correspondent who signs himself "Collotype" applies this enquiry to the oil print; and he answers it by saying that oil prints are collotypes. "Are they also photographs?" he enquires. "Demachy says 'No,' and that from the exposure of the bi-chromated film onward the process is a mechanical one. The coloured oil prints in the exhibition are consequently 'coloured by hand,' and are expressly forbidden by the rules of Section I."

AUTOCHROMES IN THE TRANSVAAL. The Transvaal Philosophical Society had a lecture by Mr. C. Harold Smith recently, when Autochromes were shown on the screen for the first time in that colony, the projection being by means of the arc lamp in the lecture hall of the Transvaal University. Mr. Harold Smith writes us that many of his slides were not intensified, but the colours showed up remarkably well, so that for lantern slides he hardly thinks intensification a necessity.

AN EXHIBITION OF AUTOCHROMES, admission free, is to be given in the large hall of the Polytechnic, Regent Street, London, W., on the opening night, Tuesday, October 13th. Gold, silver, and bronze medals will be awarded by the votes of the audience, and landscape, architecture, and genre pictures will alone be eligible. Particulars and entry forms can be obtained from R. Mitchell, Director of Education, the Polytechnic, 309, Regent Street, W.

ISOSTIGMAR SERIES I. F 4.5.

What one of our customers who has availed himself of our special offer thinks of his f 4.5 Isostigmar :

"I am sending you the enclosed print, as it shows what can be done with your new lens, the Series I. Isostigmar, at full aperture, f 4.5.

"I should mention, I am more than pleased with it and consider it an exquisite instrument."

READ PARTICULARS OF THE SPECIAL OFFER BELOW:

I ANOTHER SPECIAL OFFER. S

Further investigation of the principle of construction of the Isostigmar Lens has shown us its great adaptability. We have succeeded in designing a new Series of the Lens, working at f 4.5, which possesses the magnificent qualities of the slower series. The depth of focus being dependent on aperture cannot, of course, be as great in a rapid lens as in a slow one, but when stopped down to small stops, the depth is the same as that of the less rapid series. The angle covered by these lenses is 60°.

No.	Focus.	Size of plate covered.	Size of flange screw.	Price in Iris mount	Price in brass focussing mount.	Price in sunk mount.
2	3 in.	2½ in. × 2 in.	1.32 in.	£3 12 6	£4 10 0	£4 0 0
3	4½ in.	4½ in. × 3½ in.	1.75 in.	4 15 0	6 0 0	5 2 6
4	6 in.	5 in. × 4 in.	1.75 in.	5 10 0	6 15 0	6 0 0
5	7½ in.	6½ in. × 4½ in.	2 in.	7 7 0	8 12 0	7 17 0
6	8½ in.	7 in. × 5 in.	2 in.	8 15 0	10 0 0	9 15 0
7	9 in.	8 in. × 6 in.	2½ in.	12 0 0	13 10 0*	12 10 0
9	12 in.	10 in. × 8 in.	3 in.	19 10 0		

Lenses paired for Stereo work 7/- extra.

*To order only.

Lenses Nos. 2 to 6 are supplied in Aluminium Iris mounts unless ordered in brass mounts. Lenses Nos. 7 and 9 are supplied in brass.

ANOTHER SPECIAL OFFER.

The method which we adopted in April, 1907, of making known the advantages of our new Isostigmar Lens, by selling them for one month at a reduced rate, was a complete success. The enormous number of lenses thus sold enabled its superb qualities to be at once realised with the result that the demand then created has steadily increased ever since. To advertise this new series we are prepared, during

THE MONTH OF SEPTEMBER, 1908, ONLY

for cash with order, either sent direct or through your photographic dealer, to take orders for this new Isostigmar Lens (Series I., f/4.5 only), at the following prices:—

No.	Focus.	In Iris mount.	In focussing mount.	In sunk mount for Reflex Cameras.
2	3 in.	£2 15 0	£3 7 6	£3 0 0
3	4½ in.	3 12 6	4 10 0	3 17 0
4	6 in.	4 2 6	5 1 6	4 10 0
5	7½ in.	5 10 6	6 10 0	5 18 0
6	8½ in.	6 11 3	7 10 0	6 19 0
7	9 in.	9 0 0	10 5 0	9 7 6
9	12 in.	14 12 6		

All orders, with remittances, must reach us before the last day of September, 1908, except those coming from abroad. We are prepared to supply upon these terms for any foreign orders posted during October, 1908, after which time full prices will be charged. We do not take lenses in exchange at the reduced rate.

R. & J. BECK, Ltd., 68, Cornhill, London, E.C. 45

THE HEATON AND DISTRICT Camera Club holds its exhibition on October 27, 28, 29, 30, and 31, entries closing October 12th. Particulars can be obtained from G. C. Urwin, 24, Tenth Avenue, Heaton, Newcastle-on-Tyne.

× × × ×

THE HACKNEY PHOTOGRAPHIC SOCIETY's exhibition will be held on November 4th, 5th, 6th, and 7th, entries closing October 19th. Particulars can be obtained from W. Selfe, 70, Paragon Road, Hackney, N.E.

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THE ROTHERHAM PHOTOGRAPHIC SOCIETY holds its exhibition in the Drill Hall on October 14th, 15th, 16th, and 17th, entries closing October 5th. Particulars can be obtained from Mr. H. C. Hemmingway, Tooker Road, Rotherham.

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SATURDAY AFTERNOON CLASSES in photography are held at the Bermondsey Settlement, Farncombe Street, Jamaica Road, Bermondsey, London, S.E. Full particulars can be obtained from the secretary, Miss Margaret A. Bretherton, B.A., at that address.

× × × ×

THE HOVE CAMERA CLUB holds its exhibition on October 22nd to 26th, entries closing October 15th. Particulars can be obtained from the exhibition honorary secretary, W. Chater Lea, Cransley Lodge, Dyke Road Avenue, Brighton.

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PECKHAM AND CAMBERWELL is provided with photographic classes by the Oliver Goldsmith Evening Commercial Centre, Peckham Road, Camberwell, S.E., the lectures being given on Tuesdays and Thursdays. A full syllabus can be obtained on application to the principal, Mr. A. Pinhorn, at the school.

A STOCK SOLUTION OF PERSULPHATE which will keep quite indefinitely, and is regular in its action, may be made of

Ammonium persulphate	240 grains
Sodium sulphite	... 48 grains
Sulphuric acid	... 48 minims
Water to	... 5 ounces

This is Bennett's formula. It is diluted with nine times its bulk of water for use, but less dilution may be employed if a quicker action is preferred.

× × × ×

SHEFFIELD. Several of our Sheffield readers have been good enough to write us supplementing the Holiday Information given in a recent issue. It appears that there are many other parts of the city which furnish material for pictures, besides those mentioned by our reporter—a fact which we are quite prepared to believe. We only regret that those who have written us at length on the subject did not do so when we invited information from our readers concerning their own localities.

× × × ×

SULPHUR TONING. A correspondent sends us a P.O.P. postcard with perfectly clean whites and of a good tone and quality throughout. "I was printing a few photographs," he writes, "and by accident one of them was printed very dark, almost black. It was no use trying to tone it, so I first washed it in water and then fixed it in hypo solution of a strength of about 1 in 6. While it was fixing I added about six drops of strong nitric acid, knowing that it would precipitate the sulphur. It did so, and gave this tone to the print. I washed it well and dried it. It also seemed to harden the emulsion on the card, which was one of the Solio Glossy Court Cards. Further experiments showed the same results with ordinary P.O.P."

A NEAT ALBUM.

ALBUMS ought to be in demand for the next few months, as amateur photographers are returning from their holidays with the results of their photographic labours to be developed and printed. Messrs. John J. Griffin and Sons, Ltd., of Kingsway, London, W.C., send us a particularly neat album at a particularly low price, a combination of good points that ought to commend it to many.



The album is seen lying across another one open, in the illustration below. It is made to hold thirty-two quarter-plate prints, and has assorted cut-out openings, two on a page, with art paper leaves on card stiffeners. The cover is a very tasteful grey cloth lettered in black, and our first impression on seeing the album was one of surprise that it could be produced to sell at so low a price as one shilling. Yet so it is; and there is nothing "cheap" about it but the price. A few such albums would provide an admirable system for keeping sets of prints, properly classified.

The Episcopa: A Lantern for Projecting Opaque Objects.

Adelaide Scientific Societies: United Forward Movement. A Letter from Mr. John Sterry.

THE Royal Photographic Society's treasurer for so many years, Mr. Sterry, made a host of friends, all of whom will be glad to hear of his safe arrival in South Australia. In a private letter just to hand, his pleasure in the land finds open manifestation. In the letter below, written for publication, there is also shown a keen appreciation of the efforts of the Australian societies.

"Blackwood, South Australia.

"August 19th, 1908.

"Sir,—At the suggestion of the Microscopical Society, the whole of the scientific societies affiliated with the Royal Society, Adelaide, and of which the Photographic is one, a committee was formed in 1905 to consider a proposal to purchase an episcopa and large projection lantern of the latest and best form for the joint use of all. I was fortunate in arriving here just in time to be present at the first demonstration of the instruments, which have been made by the Zeiss Co., and to have an invitation to be present from the secretary of the Adelaide Photographic Society. Funds for the purchase were supplied by subscriptions from the societies (eight

or nine in number), which were supplemented by the Government, and thus the large expense of first-class instruments was met. The demonstration on August 12th was in every way successful. The original suggestion having come from the Microscopical Society, microscope slides were first shown, followed by micro-photographs. Then a series of lantern slides were shown by the president of the Photographic Society. Other societies were represented by exhibits of shells, flowers, coins, etc., and the whole was most successful, and the capabilities of the instruments were fully shown.

"In this case 'union is strength,' for each of the societies will be able to use these superb instruments for their own meetings. The Photographic is going to have a special meeting very shortly to bring them into use.

"Having some time to wait for a train to Blackwood, a friend who is a member of the Royal Society introduced me to Dr. Verco, the president, who kindly took us to his house to see his magnificent collection of shells, the finest in Australia.

"Yours, etc.,

"J. STERRY."

AN IMPORTANT ANNOUNCEMENT.

Special Autumn Enlarging and Lantern Issue Next Week.

The issue of "Photography and Focus" which will be published on Tuesday next will be the Special Autumn Number. It will be enlarged, with extra pages and extra illustrations, but the price will remain one penny. The articles will deal mainly with enlarging and lantern work, the season for which is now beginning. It will form an issue of altogether exceptional interest, and should be ordered promptly to prevent disappointment.

'CRITERION'

PRIZE

COMPETITION.

OVER
50
CASH
PRIZES.

First Prize,
 £5 5s 0d.

Second Prize,
 £2 2s. 0d.

Third Prize,
 £1 1s. 0d.

and

50 Consolation
Prizes of 5/- each.

Intending Competitors are
 requested to kindly note
 that there is

Only One More Day.

All entries must be in on
 - - or before the - -

CLOSING DATE,
September 30th.

♣ ♣ RULES. ♣ ♣

1. Each entry must be on "CRITERION" Paper or Postcards, any size, grade, or surface, mounted or unmounted.
2. Any number may be submitted, but the outside label from a packet must be sent with each set of 6 or less sent in
3. The cards *must* be purchased from a dealer, whose name must be given. If your dealer does not stock—send us a p.c. with his name and address, stating your requirements, and we will forward to him by return of post.
4. Entries must be sent in on or before 30th Sept. marked "Competition P," to the Birmingham Photographic Company, Ltd., Stechford, Birmingham.
5. No entry forms are required.
6. Entries will be returned as soon as possible if stamped and addressed wrapper is enclosed (not loose stamps), but responsibility cannot be accepted if any are accidentally lost or mislaid.
7. The Company's decision must be accepted as final.
8. No picture which has previously won a prize in any competition must be submitted.

The Birmingham PHOTOGRAPHIC COMPANY, LTD., Stechford, near Birmingham.

QUERIES AND REPLIES

REGULATIONS.—(1) Envelopes must be marked "Query," and the "Enquiry Coupon" found elsewhere must be enclosed. (2) The full name and address in addition to a *nom-de-plume* must be given. (3) Only one question on one subject is allowed in each letter. (4) Prints may be sent for criticism, but a separate coupon must be sent with each print, and a stamped addressed envelope (not loose stamps) for their return.

PLANTO (Hove).—One is as easy as the other.

J. B. ANDERSON (Belfast).—We have sent the letter on.

L. C. DORAN (Dublin).—Thanks for the print; it is, as you say, striking.

RUSTICS (Warrington).—It will not affect their permanence in any way.

C. M. HARGREAVES (Davenport).—Thanks for the prints, which we were glad to see.

GLAZIT (Essex).—It would not be worth while attempting to re-enamel the board.

C. W. ASTON-KEY (Hyde Park).—There is no known method of doing what you speak of.

F. WHITAKER (Skipton).—Presumably in class E or F. All slides which take awards are retained without payment.

J. COMFORT (Catford).—Clearly something is wrong with the stop or with the shutter. You had best take it to the makers.

RAMBLER (Howden).—You cannot do better than follow the course laid down in our issue for June 16th, 1908, on page 121.

W. H. WHITE (Lewes).—Probably from 7 to 9 according to the proportion used. It would be best to make an experimental test.

T. BLAIR (Trenttham).—We have handed your letter to our advertisement department, who will give the matter their attention.

OTTO (Junction Road).—We advise focussing to be done with the stop which is to be used for the actual exposure. (See rule 3 above.)

ECNEROLF (Wheatley).—Our own preference is for No. 2, but it is only a personal preference, and both are good instruments and excellent value.

ENLARGER (Manchester).—You could not do better. Failing gas we prefer a burner which has a mantle and uses methylated spirit, failing that oil.

PRINTING (Littleborough).—Ordinary type will not do. Special type are needed, which can be obtained from E. M. Richford and Co., Snow Hill, London, E.C.

CYMO (Wrexham).—Please describe exactly what it is you want to do; the enquiry is too vague in its present form for us to give you any satisfactory reply.

DUMMY (Stockport).—The proper place for the colour screen is immediately in front of or behind the lens. Little fittings to hold it there can be made or bought.

R. KERR (Woolwich).—The tone is a most agreeable one, and we are much obliged to you for letting us see the result, to which we propose to draw attention elsewhere in the paper.

CAMEO (Norwich).—Nothing can be done. It is not due to light in the camera, but to part of the balcony or a sleeve or something that got in front of the lens at the moment of exposure.

SPIDER (Glasgow).—No question is too simple; everyone must have a beginning. We should strongly advise you to get the camera with the rack focussing arrangement in preference to the other.

PYRO (Westminster).—The system referred to is no longer in use; but you may be able to get a camera second-hand; it was quite satisfactory. The N. and G. changing box is one we can recommend.

F.C. (Bray).—Our own belief is that the plates are not much faster than formerly, but that they gain in rapidity with keeping. We have been working with them as Watkins 2, and found no signs of overexposure.

RAJAR (Leeds).—The Cornex Index shows the limits within which the picture may be expected to be sharp. You had better write Messrs. R. and J. Beck, 68, Cornhill, E.C., for instructions as to its use.

G. W. BETTANY (Stapenhill).—The "Victor" mount cutter supplied by Houghtons, Ltd., seems to come nearest to your description; but most work of this sort is done by hand with a mount cutter's knife and a guide.

S. L. RICE (Willesden Green).—The darkness is due to excessive underexposure of the negative, and we do not think that any handwork upon it could give an improved result. The only way is to take it again, giving at least four times as long.

HARDUP (Birmingham).—Your best plan would be to try and manage the 15s. extra and get a folding Klito with an Aldis lens; or, failing that, to sacrifice on the camera rather than on the lens. The only thing against your selection is that you do not seem to have done so.

T. HARLEY (Handsworth).—True. But why not?

C. S. HUDSON (Whitley Bay).—We regret to say we have no prints for sale.

J. WOODHOUSE (Cyprus).—It is thoroughly respectable, but it would be well not to expect too much in the way of fees.

F. MACFADYEAN (Margate).—The best description we can find is in "Science and Practice of Photography," by Chapman Jones, price 5/4 post free from our publishers.

F. A. R. (Croydon).—The Diamond Cement of the oil shops should do, if it is transparent enough. Canada Balsam is the only perfectly transparent one we know, but it only stands very moderate heat.

ADHESIVE (Peebles).—The causes of sticking are (1) omission of the hardening bath, (2) attempting to squeeze prints without first drying them and rewetting, (3) insufficient cleaning of the glass, and (4) insufficient french chalk or other treatment.

TROMO (Old Broad Street).—We seem to have heard the name as that of some small German firm of manufacturing opticians, but it is in none of our trade lists. Probably Messrs. A. E. Staley and Co., of 19, Thavies Inn, E.C., may be able to help you.

MERU (Dorking).—It is calcium chloride, with or without asbestos, and is placed there to absorb any moisture in the air, and so to keep the paper dry. Evidently your tin was not properly closed; moist air has got in and so much water has been absorbed by the calcium that it has liquefied.

W. H. GODFREY (Exmouth).—There are blisters, the film having left the celluloid in those parts, expanded, and dried down. We have never seen any so numerous and so regular before, and are quite at a loss as to their cause. Why not take the advice of the makers of the film on the subject?

E. H. LANGHORNE (Bexley).—We do not care for a developer which contains sodium hydrate, as this softens the film, and would certainly predispose the paper to blister. We can strongly recommend the amidol formula given by the makers of the paper. That is what we use.

R. H. AVORY (Fordingbridge).—The reversal is due to excessive overexposure, and we do not doubt for a moment that the window was visible on the plate before development. We should expect it. Seconds instead of minutes would have given you a satisfactory result, we expect.

IGNORANCE (Southampton).—As it only occurs on one side of the print, it shows that the lens was not opposite the centre of the plate, or that it is not properly mounted. If all four corners were dark it would show that it had not sufficient covering power. There is no presumption in your suggestion, with which we entirely agree; but the matter is not in our province.

P.S.J. (Battersea).—It is not possible to turn a bromide enlargement into a negative after the enlargement is once fixed; but a negative of a sort can be made from it by printing by contact on another piece of bromide paper, and it is possible to make a bromide enlargement a negative instead of a positive, by a reversal method after development. What is it that you want to do?

G. M. PUCKLE (Shepherd's Bush).—You can use a quarter-plate wide angle lens on a half-plate if the camera will close up enough to allow you to focus it; but probably a great part of the half plate will have no picture on it. The lenses numbered 2, 3, 4, 6, 8, 9, and 11 should be suitable; it would be well to have one of 5½ and one of 8 inches focus we should think; but we could not be more explicit on the meagre information supplied.

DISCUS (Nelson).—Tested as you describe, exposure meters generally give discordant results; either will give perfectly reliable readings to anyone who has used them, but it is not often that at a bald comparison they agree. Most of your differences are quite trifling. If 1/30 is correct, 1/50 is certainly never incorrect, as differences of less than double are not noticeable, unless both exposures are incorrect. For instance, if 1/30 is much too short, 1/50 may appear much better; but if 1/30 is correct, you will not detect any appreciable difference between the two.

EVELYN (Northallerton).—We do not recognise the "foolscap paper"; but a very good plan of mounting glossy p.o.p. prints is to brush them over while still on the ferrotype boards with a strong glue made with ordinary white gelatine, just as glue is made. It is applied hot, when the prints are perfectly dry. When the glue is also dry they are stripped and trimmed. The mount is just damped, the dry print laid on it in position and the two together are passed between the rollers of an ordinary wringer, and come out smoothly mounted. The ferrotype must be soaked in cold water for a few minutes and then well washed in warm water before using it again. (See rule 3 above.)

LETO TITLING METHOD.

A simple and practical method of titling prints without destroying or tampering with the negative. **DIRECT WRITING—NO REVERSAL.**

By this method it is possible to reproduce one's signature in ordinary handwriting and printing simultaneously with the negative. The Leto Titling Method can be used also for the production of menus, programmes, and copying sketches, plans, etc., and if printed on Boardoids and plate marked give the appearance of copper plate engravings.

SOLD IN BOXES, COMPLETE
WITH TYPE CHART AND
GUIDE LINES

PRICE
2/-

No. 1 for $\frac{1}{4}$ -plate; No. 2 for 5×4 ; No. 3
for $\frac{1}{2}$ -plate.

LETO PLATE MARKERS.

A novel and simple method for giving a neat plate mark on masked Boardoid prints, greatly enhancing their value pictorially.

Made in the following sizes :

Series No.	Size of Plate Mark.	Packets contain	Price.
0	$3\frac{1}{2} \times 2\frac{1}{2}$ $3\frac{1}{2} \times 2\frac{1}{2}$	Two Plate Markers with Masks complete	1/-
1	$3\frac{3}{4} \times 2\frac{3}{4}$ $4\frac{1}{2} \times 3\frac{1}{4}$	do.	1/-
2	$4\frac{1}{2} \times 2\frac{3}{4}$ $4\frac{1}{2} \times 2\frac{3}{4}$	do.	1/-
2a	$4\frac{1}{2} \times 3\frac{1}{2}$ 5×4	do.	1/6
3	$6 \times 3\frac{3}{4}$ $6\frac{1}{2} \times 4\frac{1}{4}$	do.	2/-

For other sizes, ovals and circles, see full detailed accessory list.

LETO COVER MOUNTS

(WITH TISSUE PROTECTORS)

Form the last word in artistic finishing of Boardoid prints, being effective, simple, and expeditious.

Series No.	Size.	Price.
1	$3\frac{1}{4} \times 4\frac{1}{4}$	1/- per packet
2	5×4	1/- "
2a	$6 \times 4\frac{1}{4}$	1/- "
3	$6\frac{1}{2} \times 4\frac{3}{4}$	1/- "

Leto Cover Mounts are made both upright and oblong, in dark art brown. Nos. 1, 2, and 3 are also made in dark art green.

For other sizes see full detailed accessory list.

LETO BOARDOID OUTFITS.

In order to better demonstrate the wonderfully artistic possibilities which the Boardoid method of photography offers, special outfits containing all necessary materials, such as plate marker, wide margin mask, cover mounts and Seltone Boardoids, complete with full directions are now obtainable. These outfits give an excellent idea of the process, after which plate markers and cover mounts can be obtained in sizes to suit all requirements.

OUTFITS ARE MADE IN

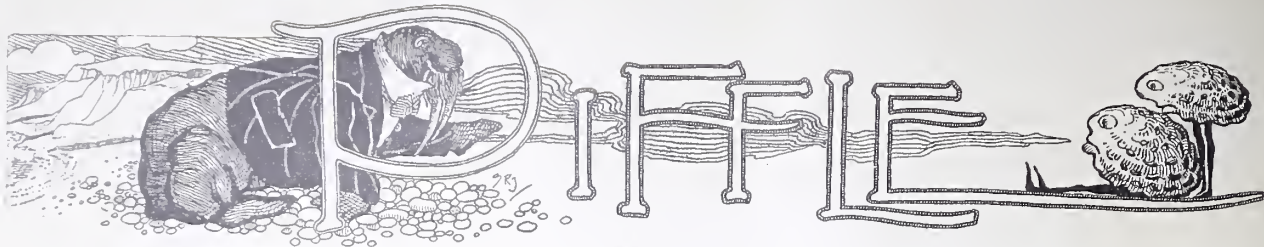
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"The time has come, the Walrus said, to talk of many things."

TWO readers have written to ask my opinion—which I flatly decline to express—upon the following paragraph: "Other members of the reptile family are tortoises, chameleons, crocodiles, and alligators. Though none of them are indigenous, they are all frequently met in England, and should be photographed, if only as representatives of their class."

* * *

There seems to be some scepticism as to whether such fowl are frequently met in England. I must confess that it is quite a long time since I met an alligator, and even chameleons don't seem as common in the London streets as they used to be. But the mere fact that I do not myself meet these creatures in my wanderings does not prove that they are not to be met with. I often think that the writers of nature notes for the photographic press see things that normal human beings do not, and I quite agree with the advice that anyone who is carrying a camera and happens to collide with a crocodile in turning a corner should at least pay the saurian the compliment of photographing it. Reptiles appreciate these little attentions. At the same time, I strongly suspect that many of those who frequently meet crocodiles, etc., and take snap shots of them, find afterwards that there is no image of any such beast on the plate. If my advice is worth anything (which I doubt), I would say to those who find that they too frequently encounter snakes that it is really a waste of time and plates to photograph them. This is especially the case when the various reptiles are noticed to be of novel form and abnormal colouring. The best plan is to dodge them, sign the pledge, and seek medical advice.

* * *

Talking about snakes, it was with a wild thrill of gratification mingled with blank unbelief that I saw a scare heading in an evening paper, "The Sea Serpent At Last!" and the sub-heading, "A very queer fish shot at Belfast Lough." Long ago I promised to believe in the sea serpent when I should see some genuine photographs of our dear old friend of the silly season, and the last paragraph in the account stated that dozens of photographers were hastening to the scene to get a snap shot of the queer fish. I confidently expected that the next day's papers would be full of illustrations of the queer fish. But they were not. The "fish" was thirty feet long (how these sea-serpents do shrink when they come out of the water), six feet in circumference (a very alderman of a monster), had three large fins, and goggle-shaped red eyes, like those of a conger but five times larger. It was shot by two brothers, and hauled ashore by four men and a pony. It hardly came up to the usual specification of a sea-serpent: it had no mane, and did not breathe out fire and smoke; but no wonder, in spite of these deficiencies, that dozens of photographers rushed to the spot. Alas! they were disappointed. There was no "queer fish," but only the body of a dead ox floating about in the water. It must be reluctantly admitted that sea-serpents are not as frequently met with as chameleons, alligators, and other birds of the month.

* * *

By the way, a well-known naturalist photographer has an Autochrome plate of a chameleon which actually changes colour while you watch it. No one who understands the English language will doubt this statement, although most people will think it is a lie. Let them.

* * *

Another newspaper paragraph sent to the editor for expert opinion has been sent on to me as a matter of course. The paragraph is somewhat musty. I have been familiar with it from my earliest youth, and it is said to have been printed first about 2007 B.C. Let us examine the facts seriatim and in detail. A well-known scientist (name not mentioned, but

probably Ham the son of Noah) has proved to his own satisfaction that actual images of objects looked at are formed on the retina of the eye, and not only that, but that photographic reproductions of such images can be obtained. To demonstrate this he fixed his eyes intently for one minute on a two-shilling piece. We are at once filled with wonder at the news of a scientist having two bob to fix his eyes on. Who could have lent it to him? He then drew a yellow screen over the window and stared at a photographic plate for 43 minutes—not 42 or 44 minutes, but 43. We must be strictly truthful and precise in these matters. All the while he was thinking of the coin. This is an important condition for the success of the experiment. If for one second during that 43 minutes he had thought of one shilling and elevenpence three farthings his negative would have been blurred. At the expiration of the 43 minutes he developed the plate. Was it fogged after its 43 minutes exposure to daylight pouring through a yellow screen? Not it. The rays from his retina had accurately recorded an image of the florin. Not two-shillings and a farthing, or any such false exaggeration, but exactly two shillings.

* * *

Anybody but a well-known scientist would have been satisfied with this result. But our scientific friend was determined to make assurance doubly sure, and so he glued his optics to a postage stamp (value not given), and a subsequent stare of 20 minutes at a plate gave him a perfect negative of the stamp. I am tempted to pause here and speculate on the problem of the correct exposure for this fascinating branch of photographic work. If a florin takes 43 minutes, and a stamp 20 minutes, what would be the correct stare for a five-pound note? This is such an interesting point that I am perfectly willing to conduct some experiments myself; and I shall be glad if readers interested in the matter will forward me one or more such notes for research (and other) purposes. The envelopes in which they are sent should be marked "Private," or someone at the office will be seized with a mania for experiment. Florins or postage stamps will be of no use, for I have been convinced for years past that my retina are not sufficiently sensitive to record photographic images of small sums, and I respectfully but firmly decline to stare for 43 minutes for two shillings.

* * *

I confess I do not quite see why the beams from the two eyes—even well-known scientists generally have two eyes unless their chemical experiments have been unfortunate—should not result in a double image, so that the negative of a florin would come out as four shillings. Presumably the experiment would be most successful in the case of a man with a swivel eye, who could with a little practice project an image of the florin on to the plate with one eye while he projected the other two shillings on to the tablecloth with the other. It would be a sheer waste of two shillings, but the negative would gain thereby.

THE WALRUS.

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PHOTOGRAPHY. OCTOBER 6TH, 1908.

PHOTOGRAPHY

A JOURNAL FOR EVERY CAMERA USER.

EDITED BY R. CHILD BAYLEY.

PUBLISHED WEEKLY.

OCTOBER 6TH, 1908. TUESDAY. No. 1,039. VOL. XXVI.



A PEACEFUL EVENING

BY FRANCIS A. TINKER.

Awarded the Silver Plaque in the Advanced Workers' Competition for August.



EDITORIAL

Slide Making and Enlarging.

The Special Autumn Issue marks the commencement of the lantern slide and enlarging season, and we therefore make a point of giving prominence to these subjects in its literary matter. The editorial article on amateur work with the limelight will forestall a number of enquiries we usually get at about this time of year, and may be the means of inducing a number of readers who have hitherto fought shy of limelight as either difficult, or dangerous, or both, to obtain and use a blow-through jet in the lantern. Mr. Harold Smith's thoroughly practical paper on the reduction of bromide prints deals with what is essentially an enlarging topic, as it is with big prints that the full economy of such methods is apparent. The secrets, if secrets they can be called, of successful bromide printing and of slide-making are made clear for beginners in the articles by Mr. Gutteridge and Mr. Kingham respectively, and other articles this week go to make up a more than ordinarily interesting issue.

By the courtesy of the exhibitors we are also able to give a first instalment of pictures from the exhibition of the Royal Photographic Society, which is now open at the New Gallery in Regent Street. A further selection will appear in each of our issues that will be published while the exhibition remains open.

Surplus Apparatus.

There are many photographers who make a practice of acquiring fresh apparatus at the beginning of each season, having a fancy for the latest devices of the ingenious manufacturer. The result is that their stock of photographic appliances is constantly growing, and that much of it they have ceased to use. The sale and exchange columns of *Photography and Focus* furnish a way of turning it into money which ought not to be neglected, and there is no time like the present for disposing of it. Next spring it will be six months older and correspondingly less valuable, although it may not have been used in the meantime. Our advice to our readers, therefore, is to overhaul their apparatus now before the winter is upon us, and to get rid of what they do not want by an advertisement in our columns. The efficacy of these small advertisements is shown by the constant stream of letters we receive from those who have tried them and found their value.

"The Times" and Photography.

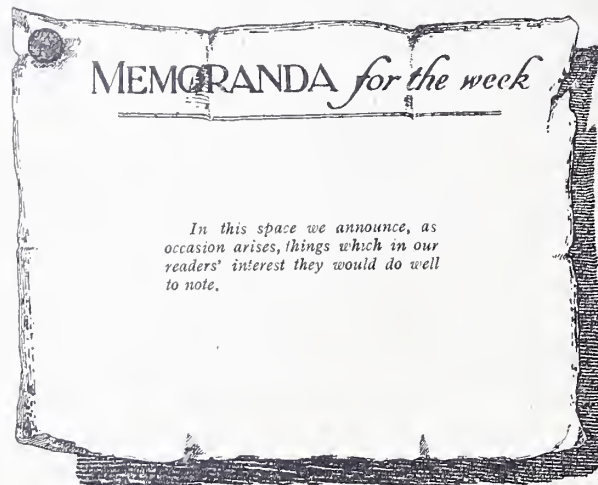
One by one the daily papers are learning that they must provide for their photographic readers with matter relating specially to their hobby. The latest to set aside regularly a portion of its space to photographic topics is "The Times," a column or more every other Thursday being given up to the followers of the camera. As befits its position at the head of the journalism of the world, the photographic column of "The Times" is a model of what such a column should be, neither snippy nor shoppy. It is at once dignified and up to date—curiously so when its attitude towards modern photography is contrasted with that of some of its contemporaries. It seems written for the large circle of influential readers it reaches, and we welcome its appearance as one more proof of the position which photography as a hobby has attained.

The Salon and the Selecting Committee.

We have received a number of letters on the subject of the selection at the Salon this year, but we do not think an appreciable proportion of our readers are interested in what is at the most a personal question. Those who have seen much of the rejected work say that it constitutes a complete justification of the drastic action of the committee, and that the best of it is work which would have been welcomed by the Royal Photographic Society. That being the case, we should advise those who feel aggrieved to send their work another year where it will find an appreciative committee. The whole *raison d'être* of the Salon, it should be remembered, is to afford an opportunity for work which is too *outré* for the R.P.S.

Emergency Wide Angle Work.

The photographer who has to limit himself to one lens is bound at times to find that some subject which he would very much like to secure is prohibited to him from the fact that it needs a wider angle than his lens possesses. If he has an ordinary R.R.—probably the best cheap all-round lens when only one can be used—its limitations will soon make themselves felt. If the wide-angle subjects which he wishes to secure are of such a nature as to demand a quick exposure, he will have to pass them by; but if this is not a necessity, a little dodging will often do all that is required. Architectural subjects are most likely to be those which are wanted, and architecture (at least the ancient, well-built architecture) will remain motionless indefinitely.



A very weak eyeglass or magnifier is the best means of securing an emergency wide-angle lens. We have known a photographer in a cathedral town go into a watchmaker's shop, purchase such an eyeglass, fit it to his lens with gummed binding strips, and get his photograph, all within half an hour of the demand for the lens arising. It is better to be forearmed, however, and to make a little cardboard fitting to carry the eyeglass, and to give this a place in the kit. There is little to write about its use. It is merely slipped on to, or, better still, into, the hood of the lens, so that the eyeglass is as near the front surface of the lens as possible. A small stop should be used, and although, when a magnifier is employed like this, on a camera in which the image can be focussed on the ground-glass, the f values of the stops must theoretically be altered, it will be found in actual practice that there need be no allowance made for this when exposing. The exposure may be just what would be given with the ordinary lens and that stop if no magnifier were attached. This infers that the magnifier is only a weak one, but a strong one is not likely to be used.

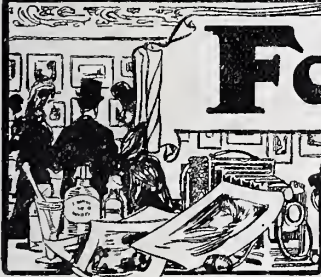
Wide Angle Pinholes.

The wide angle lens may be wanted when we have not got such a magnifier at hand, and cannot run into a shop, buy one, and extemporise a fitting. Still, the subject need not be abandoned. A few strips of gummed black paper should find a place in every photographer's kit, and with these a wide angle pinhole can be made very easily. We remove the lens from the camera front, and fasten over the opening on the inside of the camera a piece of thin card (a postcard will do). Inside it must be black, and so we cover it with gummed strips, which, extending beyond it, serve to attach it temporarily to the camera front. In the centre of the card we make a hole a little smaller than

a threepenny piece, and cover this with a piece of the gummed strip, which we well moisten first, so that when it dries it is tightly stretched over the opening. A No. 10 needle may then be used to pierce a hole in the paper by making the tip red hot in the flame of a vesta, and just pricking the paper with it. The needle is then wiped and passed (cold) through the hole so made, and the paper touched with the finger to remove any burr. If the needle just goes through, the hole will be approximately one-sixtieth of an inch in diameter, and the best extension for such an aperture will be found to be from four to five inches. This gives a very wide angle on a half-plate, and it would be better to use a little more extension if the subject will allow it.


The exposure is calculated exactly as that of a lens is calculated. The distance of the plate from the pinhole in inches is measured and multiplied by sixty, as the hole has a diameter of one-sixtieth of an inch. This gives us the f number. Multiplying this by itself and dividing by sixty-four, the result is the number which, multiplied by the exposure in seconds for $f/8$, gives the exposure in seconds for the pinhole. There is no need to provide a cap or exposing arrangement, as the pinhole exposure is sure to run to several minutes, so that the plate may be exposed by the mere drawing of the slide.

Those who think that pinhole pictures are of necessity blurry make a great mistake. The method just described, carried out with ordinary care, will yield a print that may be placed along with others obtained in the ordinary way without any attention being drawn to it by any noticeable want of definition. On examining it very closely a slight difference will be visible, it is true, but not otherwise.



Forthcoming Events

Societies will have their meetings announced here if the syllabus is sent to us at the beginning of the Session or from time to time.



MONDAY, OCTOBER 5TH.

Attercliffe P.S. Slide Making. G. Walton.
Southampton C.C. Print Competition.
South London P.S. "The Exhibition Picture." Rev. H. C. Fenton.

TUESDAY, OCTOBER 6TH.

Halifax C.C. "The World of Wonders." J. Ingham-Learoyd.
Sheffield P.S. "X Rays Photography." Dr. W. Harwood Nutt.
Keighley & D.P.A. "Land's End to Shrewsbury." Godfrey Bingley.
Manchester A.P.S. "Natural History Photography." G. Booth.

WEDNESDAY, OCTOBER 7TH.

Everton C.C. "Some of our Insect Friends and Foes." C. St. C. Crawley.
Wimbledon Park P.S. "Cameras, Shutters, and Exposures." Howden Wilkie.
Leeds C.C. "Old English Autumn Fair."
G.E.R. Mechanics' Institution. Prize Slides.
Nelson C.C. "Printing, Developing and Toning Velox Papers." W. F. Slater.
Handsworth P.S. Council Meeting.

THURSDAY, OCTOBER 8TH.

Ashton under-Lyne P.S. Committee Meeting.

THURSDAY, OCTOBER 8TH (continued.)

Batley & D.P.S. "An East Coast Ramble." W. H. Atkinson
Richmond C.C. "Boardoid Prints." J. Sargent.
North-West London P.S. "Architectural Photography." H. W. Pennett.
Wimbledon & D.C.C. "Affiliated Societies' Slides." Tasmania.
Liverpool A.P.A. "Eastward Ho!" F. Gregory Jones.
L. & P.P.A. "Bees." T. E. Freshwater.
Heaton & D.C.C. "Bromide Enlarging." Geo. C. Urwin.

SATURDAY, OCTOBER 10TH.

Preston C.C. Rufford.
Liverpool A.P.A. Widnes.
Glasgow Southern P.A. Milngavie
South London P.S. Croyhamhurst.
Woolwich P.S. Monks Wood.
Cripplegate P.S. Chislehurst.

MONDAY, OCTOBER 12TH.

Redditch C.C. "Camera and Lens for Beginners." W. D. Simpson.
Bristol C.C. "Lantern Slide Making." W. N. Blake.
Bradford G.S. P.S. "The Field Days of a Sun Artist." P. Lund.

THE hardest task which confronts the slide maker is to judge of the density of his slides. More slides are spoiled by over

or under-development, caused by a misapprehension of the density acquired, than from any other cause—at least in the hands of those who have got past their novitiate. I have had my full share of these troubles, and have therefore set down the following outline of the method which I now use, which so far is the best that I know.

Provided one always uses the same make of plates, the same developer, and aims at the same tone, there will not

be much trouble from this source. It is then simply a matter of having sufficient light to work by, and always using the same light. It is quite impossible to judge the density of slides by the red light used for developing fast plates. A good bright yellow should be used. In my own case I employ a yellow glass which has bound up with it a plain glass, with a sheet of ordinary yellow tissue paper between the two. This, in a lantern with an ordinary gas burner, gives a good light, and the paper acting as a diffuser, makes it much easier to judge the density than if the flame of the gas could itself be seen.

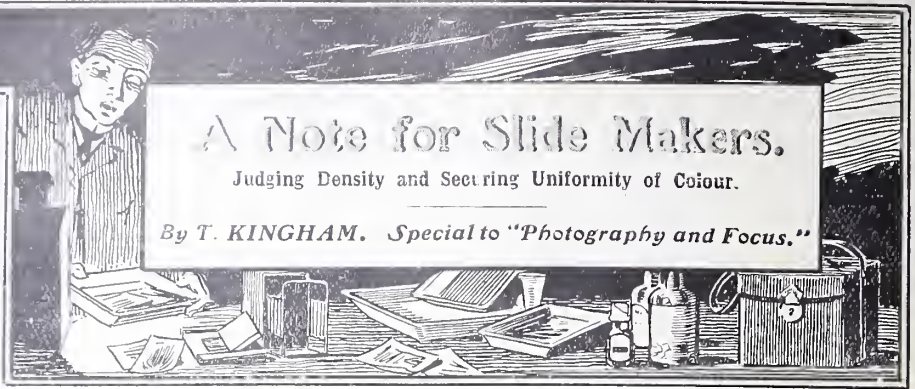
When we want to vary the tones of our slides, the real trouble of judging density begins. The warm-toned image does not seem to possess anything like as much density as it proves, when it is fixed out, to have. If we try and judge merely by the surface appearance of the plate we are likely to be misled almost as much. The deepest shadows may not look very much darker than the high lights, but, once in the hypo, they prove to be far deeper than we want. Some sort of system is a necessity, if waste is to be avoided; and I find that the only system is one which is based on the time of development.

There is no doubt that, so long as a certain developer and certain plate are used, the temperature of the developer remaining the same, the time of development for a given colour of image will always be the same. If we know that seven minutes has given us a correct result, all that we have

A Note for Slide Makers.

Judging Density and Securing Uniformity of Colour.

By T. KINGHAM. Special to "Photography and Focus."



to do is so to time the exposure of the plate that it is correctly developed in seven minutes, and we may count on getting the right density and the right colour. As soon as we attempt to decide the density by looking through the slide and leaving off developing when it seems to be done, we

open the door to failure, and we make it extremely difficult to turn out two slides alike.

FROM A DISTANT READER.

The method in practice is simple enough. Having found out, by previous experience, that a developer composed of equal parts of No. 1, No. 2, No. 3, and of water, let us say, gives the correct colour in fifteen minutes, the temperature being approximately 60° Fahr., I expose a lantern plate under the negative in a series of strips for, say, 12, 18, 24, 30, and 36 seconds. The plate is then developed for fifteen minutes, fixed and rinsed, and at once shows which exposure is correct. To get the same colour of slide at any subsequent date from any other negative, all that is necessary is to repeat the process. This might appear to mean that for every good slide made, one plate has to be used on a trial exposure; but this is not the case, unless the photographer varies his colours. If he tries to do so, he will find two lantern plates to each successful slide a very low average; if he is content to stick to one colour he will soon learn to judge the density with the eye, and will acquire the knack of exposing correctly without

the need for the exposure of a trial plate each time.

There is not much that can be done to improve an over-developed slide. Reduction may be tried, but is much more likely to spoil it than to improve it. But if it is under-developed it may often be intensified up into a good slide without risk of injuring the colour. The silver intensifier is the only one which seems to answer for this purpose. It is



A Telugu Girl.

By C. H. Dovelon (Bangalore City, S. India).

best to put the slides which require treatment on one side until there are several awaiting it. After they have been fixed and washed, if they are found to need intensification they must be hardened by immersing them in a mixture of one part of formalin to nine parts of water for two or three minutes. They are then rinsed for five minutes under the tap, dried, and put away until wanted.

The intensifier is made by dissolving ninety-six grains of silver nitrate in two ounces of water. To this crystals of ammonium sulphocyanide are added until the precipitate which first formed on adding them is just redissolved. This will require about half an ounce of sulphocyanide. The liquid is then diluted to make ten ounces, which at once makes it thick and milky again. An ounce of hypo is dissolved in four ounces of water, and added to this liquid a little at a time, with constant stirring, until just enough has been added to make the liquid quite clear again. It will not take quite all the hypo, and as soon as it is seen to be clear no more hypo must be poured in. The solution so made will only keep a few days, so it is wise only to make up what is likely to be used. About one ounce is sufficient for each slide, if it is intensified in a small flat dish so as not to waste the liquid. A glass dish is very convenient for the purpose, as the increase of density can be seen through its bottom, which saves handling the plate and staining of the fingers.

An ounce of the solution being taken, three grains of pyro, half a grain of bromide, and twenty-four grains of sodium carbonate and the same quantity of sodium sulphite are added to it.

The ordinary stock pyro-soda developer serves for this purpose; the sodium sulphite being in excess of the amount given is unimportant. The intensifier is poured over the plate, and its action, which is a rapid one, is closely watched in a good light. As soon as it has gone far enough the intensifier is poured off, the plate rinsed a moment and slipped into the ordinary hypo bath. After five minutes in this, it is washed and dried in the usual way.

The curious thing about this intensifier is that it does not seem to alter the colour of the slide, but only increases its contrast. A slide that is of a warm tone by development remains warm after intensification. A slide intensified in this way may be as good as one which has had its full contrast obtained by development only—a thing that cannot be said of slides intensified by any other method.

The simplest plan, however, is to do all that can be done to ensure the slide being right from the first; and this can be done by timing development carefully, by using plenty of safe light in the dark room to work by, and by making it a rule always to judge the progress of development of the slides by the same light.



"PLEASANT IT WAS WHEN WOODS WERE GREEN."

BY A. W. WALBURN.

Awarded a Certificate in the Advanced Workers' Competition for August.



A SUNNY ROAD.

The original of this picture is No. 218 at the Exhibition of the Royal Photographic Society.

BY J. C. S. NUMMERY.

On Mounting Enlargements.

BY EVERARD WARREN.

SMALL prints present a comparatively easy task to the mounter, although many workers seem to find it hard to get the edges to stick down without any of the adhesive showing, but when the amateur who has hitherto only dealt with quarter-plate prints finds himself face to face with the task of sticking down a very curly 15 by 12 enlargement, he realises that if he is to succeed he must alter his method somewhat. If the enlargement is on a thin paper, and is to be mounted on a smooth card, the starch paste or other mountant usually employed for little prints will do, but even then my own preference is for a more powerful adhesive.

Most enlargements are on bromide paper, and as the picture on such paper is a silver one, it is not advisable to employ a mountant of an impure or of an acid character. Common glue is a most powerful adhesive, but it is anything but pure. Good gelatine is nearly as effective a sticker, and is not at all likely to injure the print. A plain glue made of ordinary white gelatine, such as Nelson's "X Opaque," is what I prefer to employ; and as all glue loses its adhesiveness by being re-melted, I prefer only to make up as much as I am likely to require.

The procedure is a simple one. To mount an enlargement 15 by 12 or thereabouts, about thirty grains of the gelatine is allowed to soak for an hour or two in clean cold water. There is no need to weigh out the quantity; when once it has been used the necessary amount can be guessed. At the end of that time the gelatine will be quite flabby, and may be taken out with just what water is clinging to it, and placed in a jar or cup which is stood in a vessel of boiling water. The water should be changed once or twice in about five minutes, taking care that at the last it is actually on the boil when it is poured into the vessel chosen. By that time the gelatine will have liquefied completely, and should be hot enough to scald the finger that touches it.

The enlargement is trimmed, a piece of clean paper with no printing on it, at least as large as the enlargement itself, is provided, as well as some newspapers and a stiff brush. A bristle shaving brush is the very thing. The enlargement is laid face downwards on the newspaper, and the liquid gelatine is well brushed over the back of it, taking great care not to go beyond the edges. If the print will not lie



Special to "Photography and Focus."

flat enough for this, it may be drawn under a ruler or something else with a straight edge to flatten it. If the gelatine has not been allowed to soak long enough, it will not have picked up enough water to make the solution easily fluid, and a very little boiling water may be added to it and stirred in. The aim should be to get an even and very thin coating quickly, and this is helped by brushing the gelatine into a froth on the print. As soon as it is evenly coated it is picked up by two corners and lowered into position on the mount, letting it come into contact first along one edge, and smoothing it down from that edge, across the print to the opposite edge. The mount should previously have been marked to indicate the position of the print.

As soon as it is in contact all over, the clean paper is laid on the enlargement to protect it, and then the enlargement and mount are well rubbed into contact with the hand, taking care to avoid anything like a pucker by always rubbing from the centre outwards. At an early stage the edges should be closely pressed down with a finger nail to make

sure that they are adhering. When the print has thus been properly laid down in this way, the paper should be lifted up to make sure there is no mountant on it. If there is it can be turned over before being replaced, and the place marked by the mountant on the print, lightly wiped with a damp sponge, but only lightly or it will stick. The paper being put back, some smooth flat object is laid over all. I use an old piece of plate glass, and on top of this weights are put, and the enlargement is left under pressure, if possible, for twenty-four hours. At the



Reflections, D. n' am (see page 437.)

end of that time it will be flat and dry, and may be spotted or otherwise worked up.

If it is to be left loose on the mount a piece of plain paper the same size as the print should be mounted on the other side, in exactly the same way. This will help to keep it flat, but if it is to be framed or kept flat with other prints this will not be necessary.

Mounting an enlargement in this way is quite a simple operation, and we have the satisfaction of knowing that there will be no fear of the enlargement peeling off its support, and that the mountant, so far from injuring the print, will act as a kind of insulator and help to protect it from any injurious emanations from the card itself.



Uniform Quality in Bromide Work

How to secure good prints of a black and white colour, and free from stains and defects, with uniform certainty.

By J. GUTTERIDGE. Special to "Photography and Focus."



THE bromide process is so widely used at the present time that the means by which we may count upon securing uniformly good results in printing or enlarging are of interest to almost every photographer. A perfect bromide print, properly exposed and properly developed and finished, from an entirely suitable negative, will hold its own with any other form of photograph. The beauty of carbon prints and of platino-types is often talked about, but the bromide process will yield prints which even experts, by ocular examination only, cannot tell from first-class platinum or carbon work. On the other hand, a bad bromide print may be just about as bad as a photograph can be.

The bromide prints one sees about, and—let us confess it—which one sometimes produces, suffer from a variety of complaints. Some are of an unpleasant brownish or greenish colour, some are too weak and flat altogether, some are marked by the signs of blisters, or by faint or deep brownish stains, some have excessive contrast. None of these faults, except the last, is of necessity due to an unsuitable negative; they may all be caused by faults in manipulation; and that being so, it will be as well if we look into their causes, with a view to their prevention.

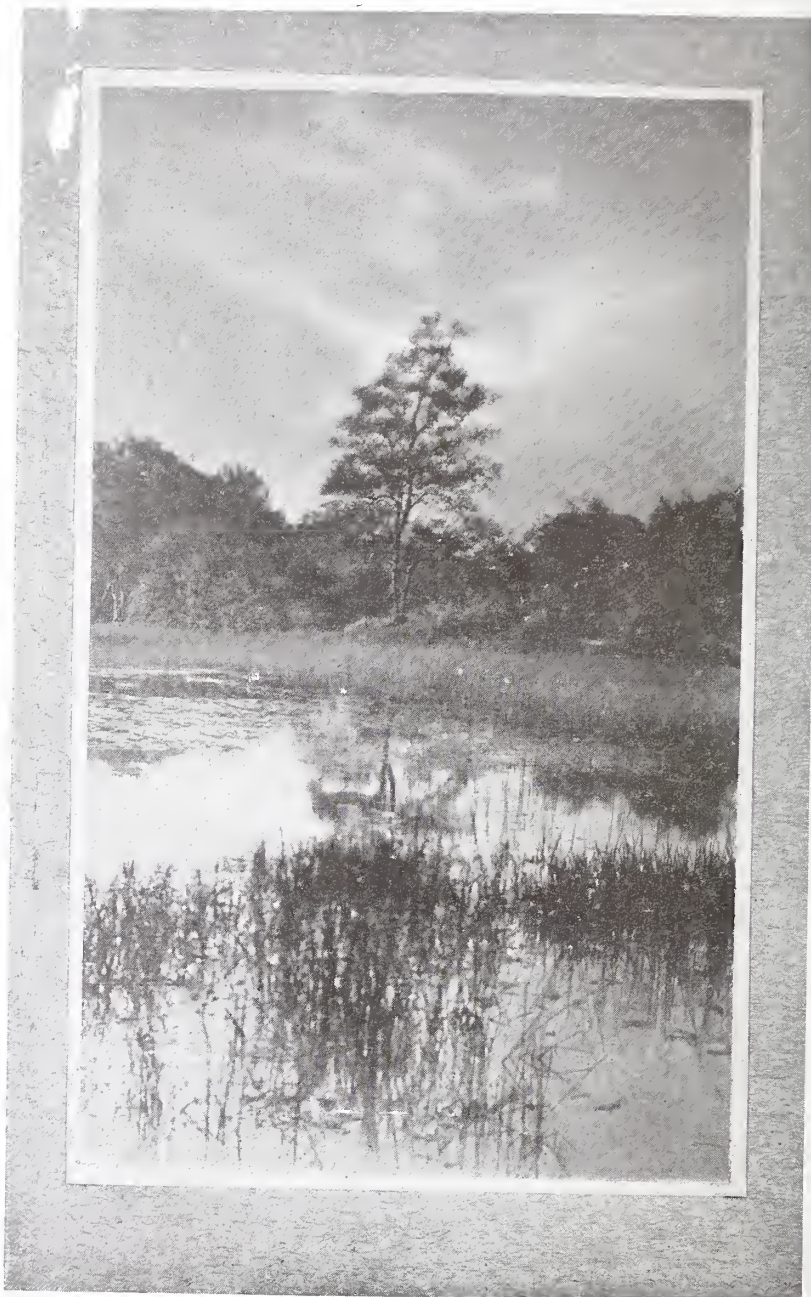
Poor Colours, Greenish or Brownish Tones.

There is no doubt whatever that if we purchase bromide paper of a standard make, and expose it correctly and develop it in a properly made-up developer of the composition given in the makers' instructions, we shall get a print of a fine black colour with clean whites. If we do not do so, it is our own manipulation that is at fault; and instead of worrying our photographic friends, or perchance the Editor of *Photography and Focus*, for "a developer for black tones," we can be much better employed in finding out where we are wrong and in putting it right.

The commonest cause of poor colour in prints is the use of an exhausted developer. If there is too much bromide in the developer, the image will be greenish. We may make a mistake and put in too much to start with; or we may use the developer too often. One action of the developer upon a print developed in it is to form bromide, which passes into solution and so spoils the developer long before all its developing powers are exhausted. Hence it follows that we must not use a developer as long as it will develop, but only as long as the colour it yields is good.

Another cause of bad coloured prints is the use of stale developer. It is important,

if our prints are to be bright and of good tone, that the developer shall contain a proper proportion of sodium sulphite or some equivalent. Now, sulphite in solution gradually



By James Wilkie, Junr.

Awarded the First Prize in the Goldona Beginners' Competition.

deteriorates, and thus we may have a stock solution of developer which will develop up an image, even a vigorous image, it is true, but which no longer contains sufficient sulphite to give a good tone.

Yet a third cause lies in a misunderstanding of the development process. The prints are not green or brown, but merely a pale grey. This results from giving a very full exposure and then trying to stop development at the right moment. It is not to be done. The exposure of a bromide print must be right; it must be such that the development seems to stop of its own accord when the print is of the right depth. Actually, development does not stop, and if left in for much beyond the time the print will be over-developed and fogged; but at least the action seems to pause, and a few seconds extra will make no appreciable difference. Any attempt to control the time of development to counteract errors in the exposure is sure to give rise to grey prints.

Bad colours and lack of vigour may also be caused by an altogether unsuitable developer, but by sticking to the maker's formula this risk can be entirely removed.

Weak and Flat Prints.

An attempt to develop to suit exposure may give rise to weak flat prints, as already shown; but they may have other causes. The developer may be too strong and active. The result is that it not only develops the exposed but the unexposed parts also, and the action has to be stopped early to prevent a general darkening. There is usually on every print or enlargement some part of the paper which has not been exposed to light at all. It may have been covered by the rebate of the printing frame, or by the head of a drawing-pin; but it has, at least, been protected by something. Such a part in the finished print should appear perfectly white and unaltered. If this unexposed part is in the least greyed over, either the light has been unsafe (not very likely) or the developer too energetic.

Bromide paper, though much more sensitive than gaslight paper, may be worked successfully in quite a bright yellow light, and it is not likely that the dark room light is responsible for fogging it, although, of course, there is always the possibility.

Too weak instead of too strong a developer may bring about a similarly pale flat result. The strength of the solution given in the formulæ may be regarded as the most suitable. The quantity of water may generally be doubled, if a slower development is preferred, and such a diluted developer will give just as bright and good prints as the full strength, provided it is given time enough, and provided, of course, there is sufficient of the active developing agent present to develop the print. But a greater degree of dilution will result in grey prints, and should only be adopted when such a result is wanted.

A negative may not possess sufficient contrast to give anything more than a grey print. In such a case, there is nothing for it but to use gaslight instead of ordinary bromide paper. A gaslight paper (except the "portrait" grades) will give brighter prints from a flat negative than can be obtained with any other medium whatever.

Stained Prints.

The commonest cause of stains in bromide work is the continued action of the developer. A print with its pores full of developer is put into hypo after a mere rinse—perhaps without it—and although the hypo checks the action of the developer, it does not of necessity stop it at once. It may even go on until the fixing is quite complete, and as a result there will be irregular black or brown stains in patches where the developer lay longest. To prevent this, a good rinse for, say, half a minute between developing and fixing is a great help; and if the print is kept moving for a little while when it is first placed in the hypo, this will help to wash out the developer to prevent stains.

Another cause of staining lies in bringing the print into contact with any metal while it contains any of the developer or of the hypo. For the final stages of washing a bare metal tank *might* be used, although it is hardly to be recommended,



Portrait. By Robert Welch.

Awarded Second Prize in the Goldona Beginners' Competition.

but for the earlier stages it is sure to bring on marks. It should be given two or three coats of bath enamel or of Brunswick black, so as to make quite sure that all the metal is covered.

It ought not to be necessary to point out that stains may be caused by a want of cleanliness, by handling the paper with dirty or perspiring hands, by the use of dirty dishes, and so on. These are points which are sufficiently obvious.

To Summarise.

The whole may be summed up by saying that, with reasonable and not worrying precautions which commonsense is sufficient to indicate, with due care to employ a formula known to be suitable for the particular paper used, and by taking the trouble to learn the correct exposure, if necessary by means of a trial strip, there is no reason why uniformly successful results should not be obtained on any of the standard makes of paper. If they are not, the amateur may at least be sure of two things, namely, that the paper is not at fault and that the formulæ given with it cannot be improved upon by the casual user.

REVIEWS

Kodak Self-toning Collodio-chloride Paper.

COLLODIO-CHLORIDE is a form of P.O.P. which has a great many admirers, and although it is certainly not as popular in this country as gelatino-chloride P.O.P., it is undoubtedly increasing in favour. A self-toning collodio-chloride paper is second to none in the ease with which it can be manipulated, in its general convenience, and in the certainty and beauty of the results attainable with it. Many a worker who finds all other printing processes full of stumbling blocks for him, finds that collodio-chloride self-toning paper will give him just what he wants every time. A sample of Kodak Self-toning Collodio-chloride has recently reached us, and was tested by us with most satisfactory results.

The makers claim as a special feature of this paper that it will "give by simple treatment in a plain hypo fixing bath, without previous washing, the beautiful cold purple-brown tone which has so many admirers." This claim was fully borne out by our tests. The printing was carried on until the result was slightly darker than the finished picture was required to be. Then, if cold purple-brown tones are wanted,

the instructions state that the print should be placed direct, without previous washing, in a fresh fixing bath containing two and a half ounces of hypo to the pint of water. It is left in this for ten minutes. For warm brown tones the print is first washed in three changes of cold water, and then is given ten minutes in the fixing bath, while for platinum black tones it is given in place of the preliminary washing an immersion of three minutes in a solution of sixty grains of common salt in a pint of water, and is then fixed as above. Washing in running water is completed in half an hour, and the prints may be dried between clean blotters, or, if wanted in a hurry, heat may be used.

These, which are almost a verbatim copy of the makers' instructions, show that the manipulation of this paper is of the simplest possible character. It is pre-eminently the printing medium of the average amateur, who wants to get good prints, full of detail and of good colour, with as little chance of failure, and as little expenditure of trouble as is possible. We convinced ourselves that it was a first-rate product in every way.

The Record and Coronet Enlargers.

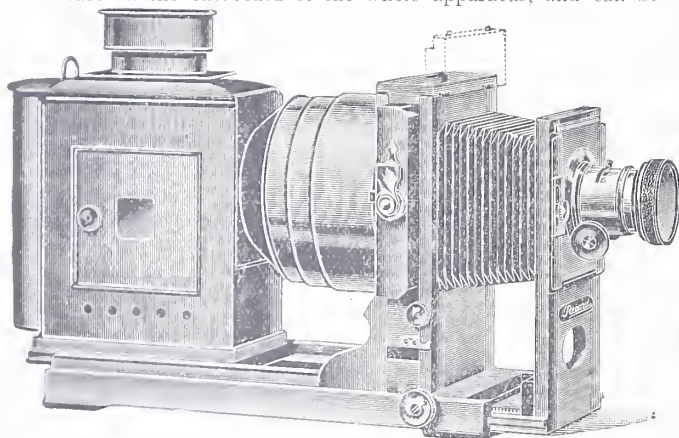
WE have recently had an opportunity of examining the two enlargers, which are made by Messrs. W. Butcher and Sons, of Camera House, Farringdon Avenue, London, E.C., and are illustrated on this page. They are known respectively as the Record and the Coronet.

The Record enlarger, which is made to take a carrier and a small condenser so that it can also be used for projecting lantern slides, is constructed in such a way that any illuminant which may be preferred can be used with it. The body is very neatly but substantially made of Russian iron, with a cowl of the same material. The base which carries this slides on the baseboard of the whole apparatus, and can be

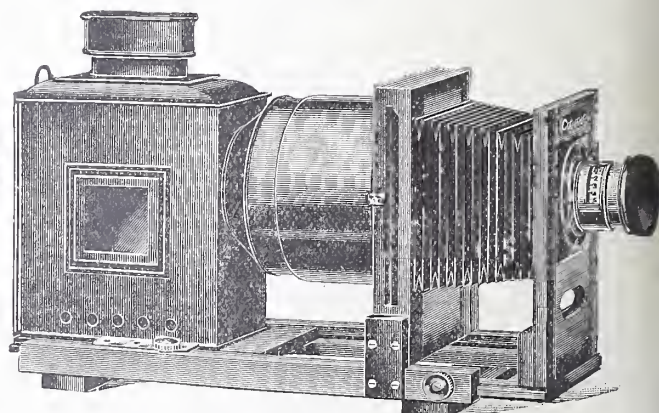
with the carrier holder by leather bellows, and is also adjusted by means of rack and pinion. The lens is on a rising front. This lens is of Messrs. Butcher's Series II., and is provided with an iris diaphragm, rack and pinion focussing, and a yellow glass cap. The whole apparatus is quite an enlarger de luxe, and is well thought out from one end to the other, well finished, and thoroughly handy in design.

The prices at which the Record enlargers are supplied are extremely moderate. In quarter-plate size, with a 5 $\frac{1}{2}$ in. condenser, but without lens, it sells at £4 15s.; and is also supplied in 5 x 4, half, and whole-plate sizes.

The Coronet enlarger is a simpler form of apparatus, but



The Record Enlarger.



The Coronet Enlarger.

clamped in any desired position. The tube connecting it with the condenser is arranged telescopically, so that every facility is given for the adjustment of the illuminant at the correct distance from the condenser to ensure the best result. The body is fitted with a tray to take an incandescent gas burner or limelight jet, or a special form of oil lamp may be used. The camera is provided with every adjustment that the most capacious worker can wish to possess. The plate can be swung both vertically and horizontally, to correct any distortion there may be in the negative—an index shows how much out of the perpendicular it has been thrown, and a clamping screw fixes it there. A double set of racks and pinions allows the negative to be adjusted both vertically and horizontally, until exactly the part required is in the centre of the stage. The front carrying the lens is connected

is none the less thoroughly serviceable. It has a roomy iron body, well light-trapped, a loose front for the lens, and the carrier is so arranged that the negative once put correctly in it, the carrier can only be inserted the correct way in the lantern. The lens is an achromatic one, provided with a helicoidal focussing jacket, iris diaphragm, and orange glass cap. For those whose purses will not allow them to indulge in all the manifold conveniences of the Record pattern, the Coronet offers a most efficient substitute at a reasonable price. In quarter-plate size it sells, complete with objective and 5 $\frac{1}{2}$ in. condenser, at £2 12s. 6d. It is also supplied in 5 x 4, or postcard, half, and whole-plate sizes.

A review of the new series Isostigmat lens will be found on page 461.

Special

to

"Photography

and Focus."

The Reduction & Intensification of Bromide Prints.

By C. Harold Smith.

Reliable processes for the improvement of the prints both in vigour and in colour

Full working details are given.

PART I. REDUCTION.

The second part of this paper, dealing with intensification, will be published next week.

FORMULÆ for reducing bromide prints are to be found in text books, but it is rarely possible to make use of them, owing to the great action of the silver solvent (generally an iodine compound) on the lighter parts of the image. Now, in many cases, possibly, it is not worth while to attempt a remedy; but through error, accident, or perhaps an assistant's blunder, enlargements or a large batch of prints may be spoilt. To save such prints by a simple method is certainly worth while, particularly when such method is easier and quicker than reprinting: more particularly when the reduced prints are practicably indistinguishable from those correctly printed and developed.

The system I am about to describe was discovered during toning experiments; but its value being at once apparent, trials were made to put it on a practical basis. The means employed are simply bleaching a part of the image away, and, after washing, removing the bleached silver compound in hypo, which, of course, does not touch the unacted-on portion.

The ordinary ferricyanide and hypo reducer, as is well-known, acts on the lighter portion of the image to a far greater extent than on the rest, and also has a tendency to give a fringe of colour between the lighter and darker parts of a bromide print. Even the addition of a bromide or similar compound to the potassium ferricyanide and hypo solution does not prevent this. I have made trials, mixing the identical bleaching bath with the hypo solution and treating a print therein, only to find the lighter half-tones eaten away and the fringe of colour between.

But the result of keeping the bleaching and hypo baths separate, and using a very weak bleaching bath, is that the darker portions are reduced to a greater extent than the lighter, the delicate tones being thus preserved. The colour of the prints remains unchanged. It is absolutely essential, however, that the bleaching bath must be weak.

BLEACHING BATH.

Potassium ferricyanide (5% solution)	5 drams
Sodium chloride (common salt, 10% solution)	5 drams
Water	20 ounces

The prints to be reduced are soaked in water until limp, then placed in the above bleaching bath for from three to eight minutes, or more, according to the amount of reduction required; then well rinsed and transferred to a large dish of water. When all are complete, and

a large number can easily be treated at a time, they are given several changes of water, and placed in an ordinary plain hypo bath, two ounces to the pint, for ten minutes, and properly washed afterwards as usual. The bleaching solution should be thrown away after use; an old bleaching solution would not tend to regularity of working. The process of reduction can be watched fairly easily, simply remembering that the reduction must not be carried, apparently, as far as is required. This, of course, is owing to the presence of the bleached image, which is subsequently removed by the hypo.

If, however, a slight degree of reduction only is required the image will scarcely appear to change at all in the bleacher. In such cases time measurement is the easiest. In three minutes (at 60° to 70° F.) such bleaching is scarcely visible, while in actual fact quite a considerable action has taken place. Also, if working by artificial light, the change seems less visible. A few trials on spoilt prints form the easiest way of estimating the degree of bleaching required.

As to the results, as I have said, there is greater action in the dark portions of the picture. Consequently, if a great degree of reduction were required, the resulting print would have less contrast than a normal print from the same negative. This of course is useful where a hard negative is concerned. For moderate reduction, as would be more usually required, the difference between a normal and a reduced print would not be sufficient to be apparent to the average individual. The essential feature of this process is that the delicate parts are preserved.

For a flat or muddy print or enlargement, therefore, the old method with iodine - cyanide should be used (*vide Photography* May 26th). Personally, however, I prefer to intensify rather than reduce where a good bromide



The Cloister, St. Augustine's, Ramsgate.
By Wm. Mackrell.

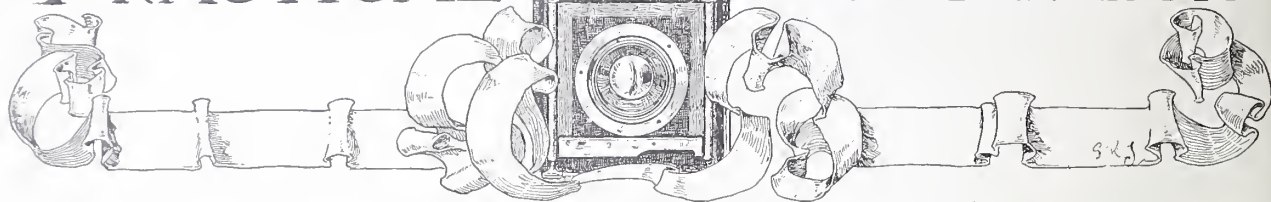
enlargement cannot be obtained direct. For this purpose a weak enlargement is made, the intensification adding the necessary strength.

Before leaving the question of reduction, it might be added that the system I have given, of bleaching with a weak ferricyanide-chloride solution, with a subsequent hypo bath, is applicable to plates; but it does not seem to act quite in the same proportion as regards the negative. The action appears to be very even, giving a general reduction, not attacking the shadows vigorously, as with the ferricyanide and hypo reducer, nor attacking the high lights chiefly, as with persulphate. For this reason it would form a useful reducer where the extreme action of the others was not required. For plates, however, on account of the slowness of the action, it is best to use the reducer four times stronger than that given above, viz., five ounces of water instead of twenty ounces for the same quantities of ferricyanide

and chloride solutions. In making up this solution potassium bromide can of course be used in place of sodium chloride if desired.

It should be remembered in considering the treatment of a print that it is not quite on a level with the treatment of a negative, for the reason that the plate is used not for itself, but for subsequent printing, which printing, as regards depth, etc., may be altered to suit the altered negative, whereas a print when reduced or intensified is itself to be the final result. Another and very necessary consideration is permanence. It is absolutely essential that the treatment of the print must not affect its permanence. The method of reduction I have described may be said to be simply an absolute removal of a part of the image, and therefore the permanence would be unaffected. Such a print may, of course, be toned by the sulphide or any other method in the usual way.

PRACTICAL PARAGRAPHS



RENOVATING HAND CAMERAS. If the leather covering of a hand camera begins to look shabby and discoloured it can be brightened up by the application of a little restorer or leather varnish. Preparations for the purpose are on the market, but if one cannot be purchased a very effective one can be made from the following ingredients:

Methylated spirit	... ..	5 ounces
Shellac	... ..	½ ounce
Glycerine	... ..	1 drachm

The shellac should be allowed to dissolve in the spirit, which takes a few days, with occasional shaking. There will be some sediment, and the solution may be carefully decanted from it, put in another bottle, and the glycerine added. Fifty grains of Castile soap should be shredded and put in a bottle with an ounce of methylated spirit, and the bottle

stood in hot water until the soap has dissolved, when this is added to the shellac solution. A packet of black or brown aniline dye may be purchased, some of its contents dissolved in an ounce of methylated spirit, and added to the mixture before use, to bring it to the colour of the leather. The mixture should be stood for a few minutes in hot water, and then be applied to the leather with a soft rag. Only a very little should be used.

* * *

REPAIRING SHUTTER BULBS OR TUBES.

It is a very annoying thing to find that the pneumatic bulb or tube has sprung a leak just when there is no chance of replacing it. A temporary mend, however, can be made with material which is purchasable anywhere—seccotine, to wit. A serious gap in the bulb itself can be repaired in the same way and with the same material as a cycle tyre, but seccotine is easier, if the fault is nothing more than a puncture. A little should be put upon the hole, and either actually spread upon the edges which are to be united, or, if the hole is too small to allow of this, it may be sucked in by manipulating the bulb. It requires a night to oxidise and thoroughly harden, but when it has done a sound job will be made with it.

* * *

TEMPORARY LABELS.

Bottles which are used for different solutions from time to time may have a patch upon their surface "matted" by rubbing with emery paper, with a drop or two of water. The glass soon takes on a fine ground surface, on which it is possible to write with a pencil. The pencil marks may be washed off or rubbed off with indiarubber when the contents of the bottle are changed.

* * *

TO MAKE A BOTTLE POUR WELL.

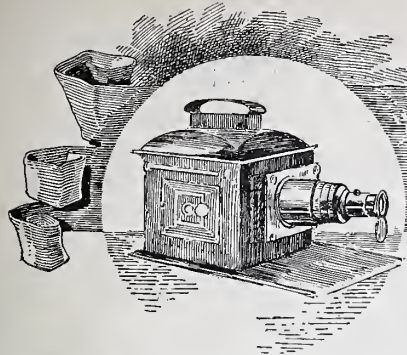
When drops are wanted, everyone must at some time or another have experienced the inconvenience of the liquid running down the side of the bottle instead of dropping from it, as is wished. If the bottle is made repellent with a little grease, except on the lip or rim whence the pouring has got to be done, this trouble is avoided, and, instead of running down the side, the liquid—if it is a watery one—will drop clear. A little vaseline will answer, but a neater method is to dissolve a little white wax in benzine, and paint it on and allow it to dry.



Sunset off Woolwich.

By W. Clarr.

Awarded a Certificate in the Special Subject, Competition.



The Lime Light for Amateurs.

By THE EDITOR.

What to buy and how to use it for displays at home; an article in favour of the "blow-through" jet.

SLIDE making is one of the most popular branches of photography; but for slides to be appreciated a lantern must, of course, be available. I am not one of those who can get satisfaction from looking at a lantern slide in a "scope" of any kind. The slide must be projected before I can enjoy its good qualities. Moreover, a lantern is a necessity to the slide maker if he is to work economically, avoiding the waste caused by making slides which when tested prove to be too thin or too dense.

Some amateurs rely upon the lantern of their society for trying their slides, but the great majority of photographers do not belong to a society at all, and so must either own a lantern or do without. The lantern for home use need not be a very costly affair. It is not as if a twelve or fifteen foot disc were required. A six or eight foot picture at the very most is what is wanted, and there are various illuminants which can be effectively used for this size. But of all these my preference is for the limelight, and for that comparatively simple form of it known as the blow-through jet.

The limelight is still the best form of illumination for lantern work in places where the electric arc lamp is not available. But many people do not like to use limelight on account of its, supposed, dangers. The belief in these is a relic of the old days when gas bags were used, and when accidents were by no means infrequent. Now that steel cylinders of compressed gas have taken the place of bags one hears nothing of accidents, although the number of lanterns in use has increased tenfold.

An amateur who wishes to use a lantern merely for trying his slides now and then, and for an occasional display of them to his friends, cannot do better than use the blow-through jet and a cylinder of oxygen, if he has gas laid on in the house. If he has not, he must use both oxygen and coal gas from cylinders, and if he likes he can in that case substitute the more powerful mixed jet. Some forms of mixed jet can be used with coal gas from the house mains. A blow-through jet, as it is called, gives all the light that is wanted for home displays. It takes its name from the fact that a little jet of oxygen is blown through a coal gas flame, and so directs a long narrow jet of intense heat upon the lime. In a mixed jet the oxygen and coal gas are mixed together, and then the mixture is burnt at the nozzle of the jet. The heat in this case is much greater and the light is whiter and more powerful.

A lantern is generally bought with a tray and pin sliding in the bottom of it. The luminant selected, except in the case of an oil lamp, is then adjusted on this pin and secured with a screw. It may be a limelight jet, an

acetylene, or an incandescent gas burner, or an incandescent electric light of special pattern. Assuming that the amateur has got his lantern, and that it is fitted with a tray and pin, all that he will require to use a blow-through jet in it will be the jet itself, some limes, a cylinder of oxygen, a nipple to screw into the cylinder and take a rubber tube, a key for the cylinder valve, and the necessary tubing. The whole outfit, excluding the lantern, can be got for something less than 50s., of which 30s. represents the cylinder for the gas, which can be hired instead of bought if this is preferred.

Cylinders of oxygen are painted black, of hydrogen bright red. The jet is provided with two tubes, the hydrogen one is generally black and the tap on it is marked H, the oxygen tube and tap are always on the right, facing the screen. To use the jet it is put on the pin in the lantern and a lime is taken out of the tin or bottle in which the limes are supplied, is gently tapped to knock the dust out of the central hole, and is slipped on to the pin of the jet. The lime tin must be securely fastened up again or its contents will spoil. The house gas is then connected with the proper tube of the jet—the black one—by means of rubber pipe, and the tap on the jet and the tap at the burner whence the supply of gas is drawn are both turned full on and the gas is lit. The supply should be large enough to make a big flame quite twice as high as the lime. The tap on the jet is then turned down until the flame is about as high as the lime itself, or a little higher. This is allowed to play on the lime for a few minutes, turning the lime occasionally by the mechanism provided on the jet. The idea is to warm up the lime gradually and so prevent it from breaking. While this is going on, the nozzle is securely screwed into the mouth of the cylinder of oxygen, first wiping clean the two surfaces which come into contact, so that there is no dust to prevent a gastight joint being made. A rubber pipe is then slipped on to the nozzle and the other end is connected to the oxygen tube on the jet, the tap on which must be fully open, and left open, all the time.

There is an ingenious little piece of apparatus known as a regulator, which can be screwed on the cylinder of gas. This is a great convenience, but is not a necessity, and adds considerably to the cost of the outfit. If a regulator is used it controls the pressure of the gas coming from the cylinder, so that we can turn the oxygen on or off by means of the tap on the jet. If we have no regulator, the whole of the control must be effected by the valve on the cylinder itself. This is quite easy and simple, but the regulator is certainly a luxury. If we turn off the oxygen by means of the tap on the jet, and there is no regulator on the cylinder, the rubber tubes will

be blown off by the pressure of the gas. No harm need result, but people may be frightened, and, of course, the light will at once go down. It is a good plan to tie the oxygen tap open with string, so that if instinctively one goes to turn it off the string acts as a reminder that the turning off must be done at the cylinder itself.

All being arranged, the lantern door should be opened so that the jet can be seen. The jet should be far enough away from the condenser to prevent risk of the flame being directed against the glass by any chance, and then, the key being inserted in the cylinder, the valve should be gradually opened. If it is done suddenly the flame may be blown out or perhaps the rubber tube blown off the nipple. There is not the slightest danger about such accidents, but they may startle nervous people. If either happens, the valve is turned off again while the tube is replaced or the gas lit again. As the oxygen makes its way into the jet the flame will be seen to get much smaller, and it may make a hissing noise. The coal gas may then be turned up until the flame is big again, and then a little more oxygen is turned on, and so on until it is impossible to get more gas through the jet without a roaring noise. To get the best result the gases should be turned on alternately a little at a time, and there should always be a certain amount of flame round the central pencil or jet of almost colourless flame, but not too much. Any flame above the top of the lime is simply wasted gas. In turning off the gas at the finish the oxygen is first turned off and then the coal gas. If the jet makes a hissing or roaring sound the gases are not properly proportioned to each other, or too much is being burned. There is no danger from such noise, but it should not be allowed to go on.

As such a jet burns, the lime will gradually pit under the action of the intense heat. Hence the arrangement for turning it round which at the same time lowers or raises the lime. The best plan is to start with the jet playing near the top of the lime, and to turn it about one-tenth of a complete circle every couple of minutes.

When the jet is seen to be burning properly its distance from the lime should be regulated by loosening the flat milled-head nut just behind the lime holder and drawing the lime backwards and forwards until the point is reached at which the light seems strongest. This is best judged by watching the sheet and not the flame itself. Once found the nut may be clamped firmly, and then this adjustment will require no further alteration so long as the limes used are of the same size.

The next thing is to centre the light, but as this is done exactly as any other light is centred in the lantern, it need not detain us long. A slide is put in, focussed, and taken out again, and then the jet is adjusted nearer to, or further from, the condenser, raised, lowered, and moved from side to side until the disc of light is even and brilliant. When this is found the screw on the pin of the tray is tightened, and all is ready for the show.

The lime after use should be thrown away if it is much broken, but if it has not apparently suffered very much it may be put back in its tin to serve again. In any case it should not be left in the lantern, where it

will attract moisture from the air and fall to a powder. "Soft" limes are to be preferred for the blow-through jet, but if they cannot be got, a very good light can be obtained with a "hard" lime.

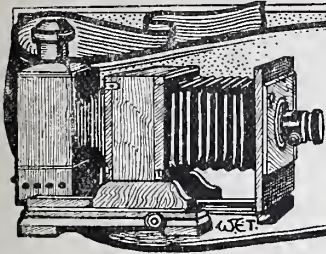
The size of cylinder to buy must be decided by the requirements and situation of its user. The smallest



On the Colne, near Denham (see page 457).

size made holds six cubic feet of gas. This should be ample for an hour's show. In an out-of-the-way country place, a large cylinder is an economy, as it only has to be sent occasionally to be filled. The gas may be kept as long as necessary, if the precaution is taken after turning it off of putting the nozzle of the cylinder under water for a minute or two to make sure that no bubbles of gas manifest themselves. If they do the valve must be screwed up more tightly. Or a little water may be poured into the mouth of the cylinder and into the socket of the valve. If the cylinder is to be sent by rail it has to be enclosed in a wooden or hemp case. The latter is preferable, costs four or five shillings, and lasts almost indefinitely.

I hope I have made it quite clear that there is nothing very formidable about the use of the limelight at home, either in prime cost or in its management. In actual use as described above it is at least simpler and easier to look after than an oil lamp, and, personally, I prefer it to the electric light, for small displays. It is unquestionably the best for testing lantern slides, and it may be safely assumed that a slide which looks well under the conditions named will look well with any ordinary method of projection.



The Optics of Enlarging and of Lantern Apparatus.

SIMPLY EXPLAINED FOR THOSE WHO HAVE TO USE IT.

By H. H. Fowler.

Special to "Photography and Focus."



HERE is a sufficiently close resemblance between lanterns for showing slides and enlargers used for photographic purposes for both to be conveniently considered together, so far as their optical arrangements go. Those arrangements are my present subject, and I must ask the indulgence of the more advanced workers amongst my readers if I find it necessary at starting to recapitulate well-known facts about projection.

All projection arrangements are essentially cameras. That is to say, if we come to examine them we find them to consist of a chamber or box, a lens and a focussing screen of some kind, on which the image is projected. The lantern lens and the camera lens are essentially the same, so much so that a first-class photographic lens is the finest instrument that can be used for lantern work. In enlarging with a lantern or in showing slides, however, the whole dark room in which it is done represents the camera, with the easel or sheet as the focussing screen. The negative or slide corresponds to the subject which we are photographing, and we get a sharp picture by adjusting the relative positions of sheet, lens, and subject; focussing by moving the lens, usually, much as is done in ordinary photography. To a great extent, therefore, the optical principles of enlarging and lantern apparatus are identical with those of camera work, but in certain respects they differ, hence the need for this article at all.

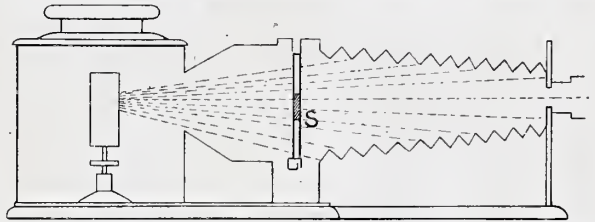
If we examine a lantern we find that it consists of four distinct parts—the light, a large glass bull's-eye or lens close to the light, a camera or holder for the slide, and a lens in front, which is generally referred to specifically as *the* lens. The bull's-eye is also a lens, and acts exactly like any other lens, but it is known as the condenser. These are the essentials of a lantern, and the rest of the apparatus merely serves to hold them together, to allow them to be adjusted one to another, and to exclude stray light from the room in which it is used. Since the lens of the lantern and the screen or easel correspond to the lens and focussing screen of an ordinary camera, the picture is focussed by drawing the lens in or out—the nearer the lens is to its subject (the slide or negative) the further must it be from the screen and *vice versa*. For convenience in lantern work, however, instead of focussing by moving the focussing screen or lens, we have the screen a fixture usually, and focus by adjusting the distance between the lens and the slide. But we must not let this obscure the fact that in essence the focussing of a slide on a screen is identical with focussing a picture on the ground-glass.

Should the reader possess a lantern or enlarging apparatus with a condenser he will best understand the function of a condenser if he sets up the enlarger, puts in a slide or negative (preferably a thin clear one that he may see what he is about), and focusses it on the screen. Then let him take the condenser away altogether, taking care if he has to move the light to do so, to put it back in approximately the same place. The picture on the screen will no longer appear evenly illuminated all over. Only the centre will be bright, the margins showing faintly, or perhaps not at all.

The explanation of this is simple enough. The diagram (fig. 1) shows the lantern in section, after the condenser has been removed. The dotted lines represent the light from the

amp. The slide S scatters a little of the light which falls upon it, but this we may ignore. The greater part of the light travels straight through it, and as it travels in straight lines, it will be seen at once that the only part of the slide through which any light can get to the lens is the centre, which has been shaded.

The light that travels through the rest of the slide strikes the bellows or front of the enlarger and is absorbed. Consequently, only the centre of the picture looks bright on the screen. Evidently, the condenser is used to secure even



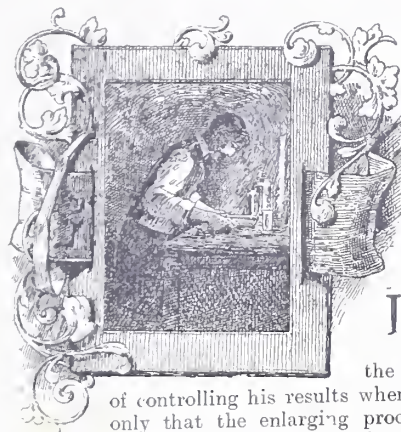
illumination of the whole picture. This it does by condensing the light, not upon the slide (to any important extent), but upon the lens. To understand the working of a lantern this point must be remembered. It can be shown that the condenser is not required to condense the light on the slide by putting the condenser not between the light and the slide, but between the slide and the lens. This was the position it actually occupied in some of the very early lanterns. When it is placed there, the image at once brightens up all over, and if its position is properly adjusted, the picture will be as bright as if the condenser were in its ordinary place. So that it is not required to condense or concentrate light on the slide. The condenser is now always put between the light and the slide, because otherwise the slide would be too near the illuminant and the heat would endanger it, and because the interposition of the thick glasses of the condenser with their deep curves and comparatively rough construction would interfere with the definition on the screen.

The real function of the condenser, then, is to ensure all the light transmitted by the slide reaching the lens, and, through it, the sheet or screen. This it does by bending the rays which pass through its edges more than those which pass nearer the centre. In other words, it forms an image of the light itself. If we take away the slide and the lens and hold a piece of white card in about the position the lens occupied we shall see on the card a brilliant image of the light itself. This image is formed by the condenser, just as the lens in a camera forms an image. It will be seen to be upside down, and all the brightly lit parts of the lamp will be clearly discernible.

The condenser then is a lens, and it is used to form an image of the light. In order to secure an evenly illuminated picture that image must be so formed that all the brightest part of it, at least, falls on the back surface of the lantern lens. To bring this about, we have to adjust the relative distances of lens, condenser, and light. Now the position of the lens is fixed by the position of the sheet and slide; if we alter it, we throw the slide out of focus. The position of the condenser also is fixed, as it is only just larger than the slide, so that it has to be close up to the slide, if the extreme

corners of the latter are to be illuminated properly. So that the only movable member of the trio is the light. Just as with an ordinary lens, the nearer the object is to the camera the greater must be the distance of the focussing screen from the lens to secure a sharp picture, so the further away the image is to be formed with the condenser, the nearer must the light be to the condenser.

Accordingly, the first operation after lighting the lamp is to put a slide or negative into the enlarger, and focus it on the screen regardless of its illumination. This shows us the position to be occupied by the lantern or enlarger, and by its lens. When these are settled, we arrange things so that without further movement of the lens the condenser forms an image of the light on the lens itself. To do this the slide is taken out, and the light is moved about until the screen is seen to be evenly illuminated all over. This tells us at once that we have got the correct position, and the slide may then be replaced and finally focussed.



Control in Enlarging.

By "Practicus." Special to "Photography and Focus."

IS it always recognised, I wonder, the great power which the photographer possesses of controlling his results when enlarging? It is not only that the enlarging process affords him many more opportunities of doing so than does contact printing, but the mere fact that the work is being done on a much larger scale itself helps to make things easier.

An enlarging lantern is *par excellence* the instrument to use in such a case, because the operator can stand beside the easel, see what he is doing, and has much more control over his final print. One of the simplest of such operations is the toning down of the edges of the picture.

It is generally recognised that very light patches near the margins of a print tend to lead the eye away from the subject, and should where it is possible be toned down. This is particularly the case with half length and similar portraits. The easiest way to deal with these is to give the whole enlargement the exposure necessary to give proper gradation on the face, and then to interpose a piece of card, which will prevent the face, etc., from getting any more exposure, but will allow us to give the margins three or four times as long. If all the margins need the extra exposure the card should be mounted on a wire or other thin handle. Both handle and card should be held an inch or two from the enlargement, at the very least, and should be kept moving the whole time so that the handle shall not show at all, and the edges of the shading shall be softened down so as to be quite unnoticeable. The further the card is from the bromide paper the less likely will its edges be to show, but the less easy is it to control the position of the shading with any exactness. An inch or two will be found the most convenient distance for the purpose.

When single isolated objects are too light in tone, it is often better to trust to handwork on the finished enlargement than to shading. But sometimes this can be done by cutting out a hole of the required size and shape in a piece of card and interposing this, so that after the whole picture has had its proper exposure, the particular part which needs toning down can have as much more as it seems to require.

Another form of control is in the use of the well-known "bolting silk." This is placed between two sheets of glass and interposed between the lantern and the bromide paper.

This applies to all enlarging and lantern apparatus in which a condenser is used. In some the position of the light is a fixture, but in most there is an arrangement by which the light can be moved backwards and forwards. In the case of enlargers in which no condenser is employed, evenness of illumination is secured by reflecting the light from a matt white surface of card or painted metal, or by using diffusers of thin paper or ground-glass. In such cases the negative may be regarded simply as a brightly illuminated object in diffused light, of which an image is formed on the easel precisely as a camera image is formed. There is always so great a falling off in the strength of the light with such arrangements that they are useless for showing slides, although, thanks to the great sensitiveness of bromide paper, the illumination is still strong enough for enlarging purposes. Still, as optically the arrangement is exactly the same as with the camera in ordinary photography, it need not concern us here.

If it is close to the paper it introduces a slight diffusion, which is increased, up to certain limits, as the distance of the bolting silk from the paper is increased. Some workers give half the exposure without the silk, and finish by giving the remainder with it. Some keep the silk stationary, others move it the whole time. In any case the result is twofold. If the negative is a little too strong in contrast for plain straightforward enlarging, the bolting silk makes the result decidedly softer and more harmonious, while at the same time it lessens the sharpness of the definition to an extent which is under the complete control of the photographer. If the silk is actually in contact with the bromide paper it softens the contrasts without affecting the definition. This it does by breaking up the deepest shadows into a series of little dots, too small to be noticeable when the picture is looked at in the ordinary way, but sufficient to impart just that degree of luminosity to the shadows which is what is wanted.

There is another very simple plan of softening the result when the negative is a little too hard. About four-fifths of the exposure is given in the ordinary way, and the remainder is made after interposing a clean piece of glass which has been breathed upon, or a plate which has been slightly light fogged, developed, fixed, and dried, so as to have a faint deposit all over it. This device will be found quite effective, and in one form or the other is very simple.

The control in enlarging is not completed when the exposure is finished. The enlargement may be immersed in a very weak developer until its image begins to show. It can be washed, laid face upwards on a sheet of glass to drain for a minute or two, and may then be developed up by means of a brush or strong developer. It is to be admitted that it is much easier in this way to spoil an enlargement than to improve it, but sometimes the improvement is very marked, and the operation is at least an interesting one.

There is also the wide subject of the printing in of clouds into enlargements, but this must be left for separate treatment. The aim of this article has been to suggest rather than to give explicit instructions. Few indeed are the negatives which can be enlarged straight away without offering any opportunity for improvement, but the particular method in which that improvement is effected must be left to the selection of the photographer, that he may choose one to meet the needs of each particular case.



THE ITALIAN TYPE.

BY A. F. HIRSCHFELD.

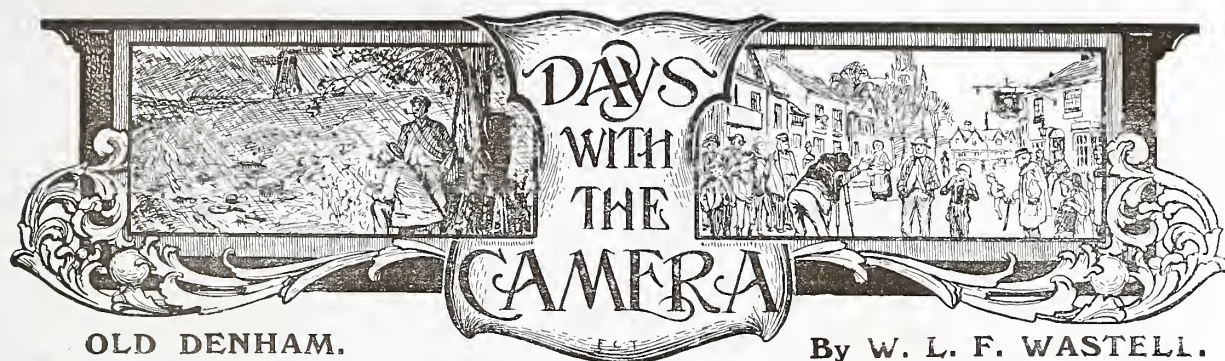
The original of this picture is No. 252 at the Exhibition of the Royal Photographic Society.



CHILLON.

BY MRS. GERALDINE MAUDE.

The original of this picture is No. 5 at the Exhibition of the Royal Photographic Society.



OLD DENHAM.

By W. L. F. WASTELL.

THE little village of Old Denham lies just over the border of Buckinghamshire, two and a half miles from Uxbridge. Pleasant roads lead to it, for the cyclist, the motorist, or the pedestrian. The last-named only may approach it from Uxbridge by taking to the canal towing-path. The canal is crossed at the first lock, and re-crossed at the second. Close to the latter will be found a stile leading through a little willow copse and over the Colne, and then a couple of broad meadows remain to be crossed before one arrives at the village. The most expeditious route (half an hour) is by tram from Paddington to Denham station, but the trains are none too frequent and the times should be ascertained beforehand.

The village and the path leading to it are visible from the station itself. Picturesqueness is at once apparent. A cluster of red roofs, with blue eaves and wisps of smoke against a background of grand trees, promise great things alike for photographer and artist. Arrived at the place itself, it will be found that few villages of such small a size present so much pictorial material within so restricted a range. Perhaps it is a drawback that the subjects are so obvious, and, as it were, ready-made. They are, however, irresistible; although we realise that hundreds before us have planted their tripods and sketching easels on the self-same spots. A stand camera will be found the most useful, and it will be an advantage to load the slides with orthochromatic plates and to use a screen when possible. If the day be sunny the time at which the different views are taken will be found important. For example, the bridge and cottages shown in one of the illustrations is well lit when the sun is about south-west; while the pair of cottages at the end of the main street are quite overshadowed by the trees towards evening.

There is nothing of striking interest to be seen in the village apart from its general picturesqueness. The fine old house known as Denham Place cannot be seen from the village itself, but a short walk around its moss-grown boundary wall results in a distant view of it. The house was built in 1667, and has had distinguished visitors in its time. Captain Cook stayed

there, and Sir Humphrey Davy often made it his headquarters on his beloved fishing excursions.

The church (St. Mary) is in the Perpendicular style. The exterior has little to commend itself to the photographer, but inside is a fine altar tomb, with recumbent effigies of Sir Edmund Peckham and his Lady. The date is 1564, and there are brasses dating back as early as 1494, and coming down to the period of James I. An old charity school stands just outside the churchyard.

A short distance beyond the church the road bends sharply to the right; but if, avoiding this, we continue straight ahead through a wicket gate, we find ourselves in a meadow, along the right-hand side of which runs a pretty stream well stocked with trout of most respectable dimensions. This stream is the Misbourne. It also bears the name of the Mease, and perhaps originates the name of the two villages of Missenden from whence it flows. This stream, at



BY THE BRIDGE.

THE BRIDGE, DENHAM.

OLD COTTAGES.

the end of the second meadow, runs into the Colne, itself a tributary of the Thames.

Crossing the Colne by a foot-bridge we reach the willow copse already mentioned as on the route from Uxbridge. Turning sharp to the right along the river there is a good deal of pretty riparian scenery for some distance. A single-arched bridge stands prominently out, and we may cross this and so reach the towing path of the Grand Junction Canal.

Enough has been said to show how to arrive at Old Denham and to indicate the way about. Quaint old corners and figures to suit them are by no means lacking there, and the meadows and lanes in the immediate neighbourhood are deserving of exploration. So far the place has mercifully escaped the erection of "desirable villa residences." What greater recommendation could the photographer require? (Other illustrations are reproduced on pages 445 and 452.)



THE TUG

The original of this picture is No. 49 at the Exhibition of the Royal Photographic Society.

BY BERTRAM C. WICKISON.

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ADVERTISEMENTS.—All communications on advertisement matters should be addressed: The Advertisement Manager, PHOTOGRAPHY AND FOCUS, 20, Tudor Street, London, E.C. All copy for displayed advertisements for the issue of any particular week must reach Tudor Street by the first post on Monday morning in the week previous.

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All advertisements to be inserted on these terms must be accompanied with remittance. To ensure insertion, letters should be posted in time to reach the offices, 20, Tudor Street, E.C., not later than first post on Wednesday.

BOX NUMBERS.—For the convenience of advertisers, letters may be addressed to numbers at the office of the paper. When this is desired, 2d. will be charged for registration, and three stamped and addressed envelopes must be sent for forwarding replies. Only the number will appear in the advertisement. Replies should be addressed: "No. 000, c/o PHOTOGRAPHY AND FOCUS, 20, Tudor Street, London, E.C."

DEPOSIT SYSTEM.—Persons who hesitate to send money to unknown persons may deal in perfect safety by availing themselves of our Deposit System. If the money be deposited with PHOTOGRAPHY AND FOCUS, both parties are advised of this receipt, and upon intimation of the arrival and acceptance of the goods, the money is forwarded, less a charge of 1/- for registration. The time allowed for a decision after receipt of the goods is three days. For all transactions exceeding £10 in value, a deposit fee of 2/6 is charged. Cheques and Money Orders should be made payable to the Proprietors, **Messrs. ILIFFE AND SONS LIMITED**, and addressed to them at Coventry.

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ADDRESS.—All communications for the Editor should be addressed: The Editor, PHOTOGRAPHY AND FOCUS, 20, Tudor Street, London, E.C.

TO CONTRIBUTORS.—The Editor will be glad to consider original up-to-date manuscripts on photographic subjects. All contributions must be typewritten, or in very legible handwriting, on one side of the paper only, and should bear the name and address of the sender. Letters or communications arising out of matters already appearing in the paper are not paid for. The Editor disclaims legal responsibility for the safety of matter submitted to him, but he will endeavour to return rejected manuscripts, etc., when a stamped addressed envelope is enclosed for that purpose. No notice whatever can be paid to communications without the name and address of the sender, not necessarily for publication.

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PAYMENTS.—Articles and illustrations are paid for on acceptance.

INTERVIEWS.—The Editor will be at 20, Tudor Street, on Wednesdays, between the hours of 9.30 and 11.30 a.m., but can only be seen at other times by appointment.



A CATALOGUE OF LANTERNS and accessories has just been issued by Messrs. J. Lancaster and Son, Ltd., of 275, Broad Street, Birmingham. It will be sent free on application.

THE REDHILL SOCIETY's exhibition will be held on November 20th, entries closing November 7th. Particulars can be obtained from the honorary exhibition secretary, J. Paterson, Ness House, Redhill.

BOARDING PHOTOGRAPHY is the subject of a lecture which the Leto Co., Ltd., of 3, Rangoon Street, London, E.C., will be glad to lend, with finished specimens and materials, to any member who wishes to give an evening to his photographic society. The company asks for a clear fortnight's notice at least.

THE LANTERN SLIDE EXCHANGE CLUB, whose title explains its objects, has two or three vacancies. The subscription is 1s. per annum. The honorary secretary, Capt. J. S. Hawkes, J.P., of Mutley House, Plymouth, will be pleased to send a copy of the rules to anyone interested.

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THE ANNUAL AFFILIATION EVENING at the Royal Photographic Society's exhibition was September 18th, when some 400 members of affiliated societies and their friends were present.

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THE WATFORD CAMERA CLUB's exhibition is fixed for October 28th and 29th, entries closing October 22nd. The prospectus can be obtained from Mr. W. Branch, 100, High Street, Watford.

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THE BALHAM CAMERA CLUB commenced its weekly meetings on the 16th inst. The honorary secretary, Mr. J. S. Child, of 25, Sternhold Avenue, Streatham Hill, S.W., will be pleased to send particulars to anyone interested.

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THE PORTSMOUTH CAMERA CLUB's exhibition will be held from November 2nd to 11th. Entry forms are ready, and can be obtained on application to the honorary secretary, Mr. F. J. Lawton, at 20, Clarence Square, Gosport. This is the last of the group of three South Coast exhibitions, and there will be ample time for exhibits to reach it from the R.P.S.

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THE COVERS OF "PHOTOGRAPHY AND FOCUS." Mr. Samuel F. Blyton writes as follows: "The letter of Mr. Kempsey-Bourne in your last issue re the lighting of dark rooms, emphasising the necessity of raising the lamp above the level of the table, induces me to send a little wrinkle which may be useful to some of your readers. It is, 'Don't have a lamp at all!' Select a corner and cover the wall for about six feet on two sides, that is, two spaces of three feet square on each wall, with the red covers of *Photography and Focus*. Now place at about six inches from each wall in the corner an empty jam jar bottom upwards, and on it a wax candle. In front of the jar place a piece of stout millboard bent vertically at an angle of 90°, pasting also red covers on the inside of the card. The result is you get red light reflected in abundance, the eyes being meanwhile shaded from all glare, and the plate much less affected than it would be by light coming through ruby glass. One can also expose a plate or paper to the candle rays when desired without having to stop development, etc., which may be going on at the time. If any of your readers care to try this easy and economical 'tip' I don't think they will go back to the 'hock bottle' or the evil smelling lamp generally used. Of course, where convenience exists, a length of rubber tube and a gas jet may be used and the red paper carried somewhat higher so that no white light is reflected." No doubt development is perfectly possible on the lines suggested by Mr. Blyton, still the dye of our covers is selected for other qualities than its non-actinic colour, and we could hardly advise anyone to place too much dependence on its capacity for absorbing all the rays likely to affect a plate injuriously.

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PRESTON'S JOURNAL FOR OCTOBER contains a number of interesting photographs of eggs. A feature of the issue is a most fascinating and uncanny story entitled "Sargasso," by Mr. Ward Muir.

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EASTMAN KODAK CO. OF NEW JERSEY. The directors have declared an extra dividend of two and a half per cent. upon the common stock of the company, payable November 1st, 1908, to stockholders of record at the close of business on the 30th September.

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THE NOTTINGHAM CAMERA CLUB officers for the year are: President, Arthur Marshall; vice-presidents, A. Black, W. S. Ellis, G. Hugo Heynes, J. Houston, W. H. Kirkland, W. Mosley, J. T. Radford, and T. Wright; treasurer, H. Roberts; reporter, G. R. Crouch; anternist, S. W. B. Vines; auditor, W. Mosley; librarian, W. Goodchild; editor of journal, W. H. Kirkland; of portfolio, W. Murray. The honorary secretary is now Mr. A. E. Pollard, of 4, Hedley Villas, Beech Avenue, Nottingham.

THE LONDON AND PROVINCIAL Photographic Association held a "congress" of photographers at the Franco-British Exhibition on the 26th ult. Mr. T. E. Freshwater presided, and addresses were delivered.

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THE CLASSES AT THE CRIPPLEGATE INSTITUTE recommence on Wednesday next, and those desirous of learning photography either as a business or only as a hobby should make application to the Institute for further particulars. Lectures and demonstrations are given by Mr. John H. Gear, who not only deals with the technical but also with pictorial work. His own work, which is generally well-known, is a sufficient guarantee that much assistance may be obtained by attending the classes. There is an early class at 6.30 to suit those engaged in the city, and another at 8 p.m. The syllabus is very comprehensive, and embraces almost everything one is likely to require in photography. Mr. Gear also gives a series of these lectures and demonstrations at the Thornton Heath Polytechnic at 7 o'clock on Thursday evenings, commencing October 15th.

THE VERASCOPE has been used by Messrs. Richard to secure 200 stereoscopic transparencies at the Franco-British Exhibition. The collection is on view at Messrs. Richard's show-rooms at 23a, Albemarle Street, Piccadilly, London, W.

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TICKETS FOR THE NEW GALLERY. The red book having been published before it was decided to open the R.P.S. exhibition every evening, the tickets refer only to Monday, Thursday, and Saturday evenings. We are asked to point out, however, that holders of red book tickets can obtain admission by them on any evening.

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HOME KINEMATOGRAPHS AND LANTERNS. MESSRS. W. BUTCHER AND SONS, LTD., of Camera House, Farringdon Avenue, London, E.C., send us a little booklet entitled "Empire Home Cinematographs," which describes the apparatus they supply for the exhibition of moving pictures at home. They have also issued "Optical Lanterns and How to Use Them." The former will be sent free to anyone on application, the price of the latter is 6d.



REPLIES TO CORRESPONDENTS.

Queries are dealt with in strict rotation in the order received. Only "Urgent Apparatus" queries will be dealt with by post, for which purpose a stamped envelope must be enclosed.



REGULATIONS.—1, Envelopes must be marked "Query" and the "Enquiry Coupon" found elsewhere must be enclosed. (2) The full name and address in addition to a *nom-de-plume* must be given. (3) Only one question on one subject is allowed in each letter. (4) Prints may be sent for criticism, but a separate coupon must be sent with each print, and a stamped addressed envelope (not loose stamps) for their return.

T. E. MOSS Winsford.—Mercuric chloride and iodide, oxalic acid, lead acetate, potassium cyanide, ammonium sulphocyanide, potassium oxalate.

CARBON Stamford Hill.—"The Carbon Process," by Illingworth, price 1s. nett, or post free from our publishers for 1s. 2d., is what we should recommend.

PREMO (Bishop's Stortford).—They are reliable, just as a tape measure would be reliable, but the occasions when they can be of any real service are very rare.

CHARLIE Shepherd's Bnsh.—Shellac varnish is the best possible coating for the wood, which may be good white pine. Marine glue makes a good cement.

D. SMEDLEY Nottingham, W. BAINBRIDGE (Camberwell).—We have asked our advertisement department to look into the matter and to communicate with you.

RED CLOUD Kirkby Lonsdale.—We never heard of the make in question. It would be wise to get the apparatus on approval and give it a careful test before finally deciding.

C. HUMPHRIES (Aminster), W. A. GEATE (Forest Hill), TIPPLETON AND HASDELL (Northampton).—We have handed over your letter to our advertisement department for attention.

ELKAY Middlebrough.—Undoubtedly the best method is to copy in the camera using the ordinary lens, if the camera will extend far enough, and, if not, using a wide-angle lens.

QUAKER Millmber.—Sorry we cannot help you, but we have to limit this column to replies to specific questions, and cannot give "suggestions" or information of a general character.

SOLUBILITY (Edinburgh).—According to "The Photographic Annual," hydroquinone requires seventeen times its weight of water at 60° to dissolve it. We have not got figures for the others.

TEALEE (Kilburn).—No, it is not so snitable, being very prone to bring on reticulation, and it is not so effectual in removing bichromate stain. One per cent. is quite strong enough if it is to be used.

J. ANDERSON (Aberdeen).—We believe $5\frac{1}{2} \times 3\frac{1}{2}$ to be a coming size, and greatly prefer it to 5×4 . Any difficulty in the matter of plates could be got over by ordering a quantity and keeping them in hand. It is quite easy to keep good plates in first-rate order for at least a year or two. So much paper of that size is used that you need have no fear on that score.

F. A. TREVOR (Scunthorpe).—The only person against whom you have any claim is the person who gave you the order; and if need be you could take proceedings to recover the amount from him.

FEX (Harpurhey).—It has to be at the distance specified or thereabouts. The largest stop that will give good definition is the one to use; you will not often want anything smaller than f/15 we expect.

J. H. TITE (Hinkley).—The best plan will be to use the maker's formula without bromide; be very careful not to overdevelop. Fix and wash thoroughly, and, if necessary, intensify with mercury and ammonia.

L. GODLEY (Norwich).—The filter is clearly at fault for the plates in use. It would be well to have it tested. You will also find it better to use one brand of plate for all three negatives, developing them together.

E. A. HARVEY (Whitehall Park).—It may yield to a five per cent. solution of sodium sulphite, to which a few drops per ounce of hydrochloric acid have been added; we can suggest no other likely treatment.

PRIMIUS (E. Dulwich).—As gold is not attacked by sulphur compounds like silver, it is generally assumed that the more gold there is deposited on a silver print the greater are its chances of permanence.

J.G. (Glasgow).—No. 5 of the Photo-Miniature series deals with Stereoscopic Photography. It is out of print; you might get a copy by advertising. There is no book, however, likely to be of much service to you.

LAMP (Thornton Heath).—From your description we should think the light unsafe, if you are going to watch development. But if you keep the dish covered for practically the whole time, it ought to be possible to use it.

JARVIS (Preston).—Your trouble is blistering. It may be due to the use of a developer too strong in alkali, to the use of a fixer containing too much hypo, or to the different solutions used being at different temperatures. Perhaps your washing water has been too warm. Any of these would cause it.

H. L. EDWARD (Dublin).—Unfortunately, the process you outline is quite impracticable. If you think it out for a minute you will see that it cannot possibly give a picture in colour, since the negative contains no record of the colours of the original, but only of its tone values, or light and shade.



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NEW LENS (Jedburgh).—We can confidently recommend the Fulmenar, and would advise you to get it.

CRISTOID (Scarborough).—We believe Houghton's, Ltd., of 68 and 69, High Holborn, London, W.C., continue to supply them.

P. FRIPP (Bristol).—The balsam has been made too warm, or contains a solvent. If the latter, heating should not be necessary.

PHOTO KENSAL (North Kensington).—A vignetter would not disqualify, but there certainly seems to be other hand work on the prints sent.

NOVICE (Aldershot).—The method is quite correct enough for all practical purposes, and is described on page 374 of our issue for September 8th.

IRIS (Brixton).—One of the blades of the shutter is displaced or missing, no doubt. If it is no worse than your sketch indicates, no harm will accrue from leaving it as it is, and it will not affect the exposure necessary.

LINER (Dover).—This is due to light which has leaked in round the edge of the printing frame. You must examine your arrangements and find out by that means how it gets to the paper. The masks are not at fault.

BEGINNER (Redhill).—The figures are either feet or yards, a single trial will show you which. They indicate that when the pointer is against one of them an object at that distance is in sharp focus on the ground glass or plate.

REV. A. C. STRATTON (Hampstead).—We like one part of rodinal to forty of water as the maximum dilution. No special precautions need be taken against staining, and the time will be somewhere near what you require, or a little less.

ACID-AMIDOL (Newport).—We know of no advantages over any other developer. No amidol developer keeps. It is better to use the sulphite formula, as the bisulphite lye is not easy to get, and is by no means a standard chemical.

J. H. PHELPS (Crouch Hill).—You may be quite sure that the make of camera and lens had nothing whatever to do with the success of the result; but if you care to write and ask him we will send on any letter you send under cover to us.

CRANKY (London, S.E.).—Your arrangement could not give a stereoscopic impression, as there is no means by which the two eyes of anyone looking at the photographs see two different pictures. You would only get one picture with a doubled or blurred outline, which could not give rise to any stereoscopic sensation.

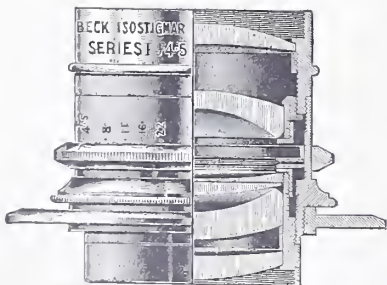
MAPLE LEAF (Ottawa).—We are constantly pointing out that we do not insist on the condition with readers over the seas. It is not a photographic but a microscope lens you want. Zeiss make a special lens for the purpose; but very good work could be done with a lin. microscope objective and a little camera attached to the tube of the microscope, the eyepiece being removed.

W. J. JEFFERY (New Southgate).—Something has got at the negative if this mark really arose as you say it did. What that something is we cannot say. If it is only a drying mark it might disappear by bleaching the negative and redeveloping it, as in the so-called "chromium intensification." But we suspect chemical dust to be the cause of it, and in that case it is incurable.

The New Series Isostigmat Lens. No. 1. f/4.5.

THE latest addition to the lenses made by Messrs R. and J. Beck, Ltd., of 68, Cornhill, London, E.C., is a very rapid form of their well-known Isostigmat, constructed to work at an aperture of f/4.5. It is known as the Series I. Isostigmat, and one of these lenses has recently undergone a very careful test in our hands, the result of which we are glad to be able to put before our readers.

The lens actually submitted to us was one of 6in. focus, No. 4 in the makers' list, made to cover a 5 x 4 plate, and selling in the ordinary way at £5 10s., in an Iris mount, but during the month of September Messrs. Beck made a special offer of the new lenses at reduced prices, as our readers know, and this particular lens could then be obtained for £4 2s. 6d. As can be seen from our illustration, the lens consists of six glasses, arranged two before and four behind the iris diaphragm; two of these are cemented, so that the total number of glass-air surfaces is ten. Such an arrangement is supposed to favour the production of flare spot, but we could find no trace of this defect in the lens sent to us for trial, which gave a very clear and brilliant image free from all signs of fog.



A. R. FISK (Saxmundham).—We have sent your letter on.

O'M. (Dublin).—We have sent on your letter to Mr. W. Tylar, of High Street, Aston, Birmingham.

M. DONALDSON (Ecclefechan).—We have asked our advertisement department to take the matter up.

H. SHAW (Nottingham).—Both are in the front rank, and there is indeed little to choose between the two. You will not be wrong with either.

B.E.P. (Cardiff).—Its price new would be about 50s. It is not a well known make, but you might perhaps get half price for it with a little trouble.

CONSTANT READER (Enniskillen).—If the rules exclude anyone who has won a prize in a photographic competition, you will certainly not be eligible.

GROCEER (South Shields).—The copyright does not rest with us, and we could not undertake to supply prints. We often feel much as you do yourself in the matter.

D. A. SCOTT (Market Harborough).—We cannot explain it, except by saying that with a developer containing caustic alkali, such as we presume was the case with the hydrokinone, there is always a risk of frilling, especially in warm weather.

C.S.B. (Chertsey).—We cannot recognise the complaint from your description. Please repeat the enquiry, sending with it one of the negatives which are defective and we will try to help. Send as full particulars as possible with the negative.

TELL. MESS 101 (Islington).—If you will send us a negative or print, preferably the former, and repeat your enquiry, we will do our best to point out what is wrong and help you to put it right. Never mind putting us to any trouble; we want to be of service.

E.J.C. (Bermondsey).—The fault is that the lens is not quite suited to the camera, nothing more. Perhaps you could arrange to let it in to the front so as to bring it near enough to answer your purpose. It should not be difficult. The lens is a rapid rectilinear.

AN ENQUIRER (Fulbourne).—The ingredients are added in the order given in the formula. The prints are washed, then placed in the toning bath, then washed and then fixed, just as in gold toning. The colour is a brown which is very agreeable with matt surface paper, but not quite so suitable for glossy.

POST CARD (Middlesbrough).—If your camera has only a single extension you must rack the lens out as far as it will go and focus the postcard by moving the camera to and fro. This will show you how large you can get it direct, and if this is not big enough you will have to enlarge. The whole lens should be used. It is possible, sometimes, to attach a magnifying glass or reading glass to the front of the ordinary lens and in this way to copy same size without much extension.

JUZZEE PUM (Bournemouth).—Something of the kind you want is in preparation. Either position of the lens will do, it makes very little difference. We presume you cannot focus near objects because the camera does not extend far enough; in which case you must use the complete lens. There is nothing in your letter to show that there is anything wrong with the lens; but the focussing scale ought to have been right for the lens if the camera was fitted with the lens when you brought it.

The actual focus was slightly in excess of 6in., and the back focus about 5½in. The marking of the stops was strictly accurate—a point in which many lenses err, sometimes to a surprising extent. With the Series I. Isostigmat, however, we found f/4.5 to be f/4.5, and so on with the other engraved apertures.

The angle included by the new lens is 60°, and over the whole extent of the plate we found its definition to be excellent. Distortion was practically non-existent, and the corrections for curvature of the field and for astigmatism were very thorough. In fact, we have examined comparatively few lenses which proved to have so flat a field as this one. It was practically free from spherical aberration, and its achromatism also proved to be perfectly satisfactory. The only weak point which need be referred to was that of the evenness of illumination, the loss of light towards the corners of the plate being considerable.

We have specified the different points upon which the lens was examined in order that those of our readers who are more advanced in their work might know that our tests had covered all the different factors which go to make a photographic lens good or bad. For those who are content to take a summary of the results we may say that the lens sent us proved to be one which may be described as very suitable for very rapid work, such as is required by those who go in for much hand camera work, especially if they use a reflex. It would also do excellently for portraiture, and for general photography, while the smaller sizes should be very serviceable for cinematograph work. It was certainly extremely rapid and at the same time gave at its fullest opening a beautifully crisp sharp image over the whole of the plate.



Wellington

CARBON

S.C.P.

FOR PRINTS OF SUPERB VIGOUR.

From a Negative on a "WELLINGTON" SPEEDY PLATE.



"The time has come, the Walrus said, to talk of many things."

NOW is the season when goodly chunks of valuable space in the pages of photographic papers are occupied with announcements of forthcoming exhibitions. That is one of the worst features of exhibitions—they are always forthcoming; there is no end to them. Even those societies that succeed in achieving a heavy financial loss on their annual show are by no means abashed, but raise a loan on the security of their assets, and hold another show with even more disastrous results both from the monetary and artistic point of view. It is strong testimony to the natural gullibility of the human race that a person who has once been to a photographic exhibition should ever be persuaded to go to another. Yet go he does; and he is even beguiled at times into paying to go. It may be asked why I ever go to exhibitions myself. The reason is that I do it as a sort of penance. I might otherwise be too happy and light-hearted.

* * *

No one's eyes goggle so frenziedly over the announcements of forthcoming exhibitions as those of the pot-hunter. He scents medals afar off. Very often they never come any nearer. And a good job too. I don't object to a modest medal if it happens to come my way. I have a whole boxful of such gawds somewhere; although on second thoughts I will not speak too confidently as to that, because it is quite possible that a one-time domestic may have included them in the extensive selection of mementoes she bore away with her to remind her of her happy but brief sojourn under my humble roof. However, if by some strange chance she overlooked them I am safe in repeating that I am still the possessor of a box full of medals and plaques, and I make a steady addition to my scanty income by the sale to the waste-paper man of certificates of merit.

* * *

But all these things have come to me as the result of mere casual and off-hand competitions to which I am sometimes goaded by a sort of cheerful sporting instinct. I am no pot-hunter. If anyone called me that I should hang around to take advantage of the first opportunity of chalking "Ananias" on his back. Moreover it beats me hollow how any sane man can grump and mope around just because someone else has captured a tin-pot medal he was after himself. I am sorry for a chap like that. He must have missed so many things that are better than all the medals ever struck. I have sometimes taken a world of trouble to produce a print—the most splendid my limited talents could command—for the express purpose of placing it in a pair of little hands that would assuredly play sad havoc with it; and when the little eyes belonging to the owner of the little hands have sparkled with delight do you think I have walked away to hunt for a medal? I once expended infinite pains on making an enlargement of a friend's head taken from an old and faded group. It took me longer to accomplish than any ten exhibition prints I have ever made. The widow for whom I did it looked at it in silence for so long that I thought I had not succeeded after all. Then she suddenly kissed it and burst into a passion of tears. And upon my word I was so taken aback that I quite forgot to ask her to award me a plaque.

* * *

I am afraid that what I have just written is not up to Piffle standard, but really when I see men clawing around after medals, and grumbling because there are not enough, and anathematising judges for not bestowing awards on them, I have got to say something. And having said it I will, if you please, light my pipe and put on my fool's cap, which accidentally slipped off.

* * *

There is no doubt that some people will go to any lengths to secure a subject they think will command acceptance at the hands of a selecting committee. One exhibitor at the "Royal" shows a photograph of a mesmerised bulldog. He

mesmerised it himself. He says so in the catalogue. You wouldn't catch me mesmerising a bulldog, at any rate not while my mother-in-law was available for the job. If I had to photograph a bulldog I should want to give undivided attention to the manipulation of my apparatus and the preservation of my garments and their contents. Yet here we have a case of an exhibitor who not only does his own photography but his own mesmerism. I shall confidently expect a print next year from Martin Duncan entitled "The fascinated boa-constrictor," with a note to the effect that it was fascinated by Martin Duncan. I hope for Martin's sake that the process won't be reversed.

* * *

Very likely a good many other workers have made equally daring and praiseworthy efforts to get something novel, and yet their efforts have been ruthlessly rejected. It is entirely their own fault. There is a quite simple and infallible method now in use for getting prints into an exhibition. The first step in the procedure is to make as many prints as you want to show; you need not stint the number, and the quality of them doesn't matter one jot. The next step is to get on the selection committee. The other steps are easy and obvious, although it may simplify matters to attend the committee meetings armed with a poleaxe or a six-shooter. Don't be betrayed into arguing about this print or that going in. Put the whole bundle through in one lot. Few men can see any reasons for rejecting a picture when they are squinting into a revolver barrel.

* * *

For you, my poor friend, whose soul yet hankers after awards, I have a still simpler plan. Hold an exhibition of your own. Draw up your own rules and compile an award list that shall stagger even yourself. Make as many prints as there are awards. This will take you a long time, for I know what your prize list will be like. Then constitute yourself a selection committee. Pretend to reject some of the prints just to add a touch of realism to the proceedings, but ultimately admit them all, bestowing on each the encomiums to which you will certainly consider them entitled. Proceed to hang the pictures yourself; or, better still, hang them and yourself. Hang them all "on the line"—yourself by the neck, the others attached to your feet. We shall all rejoice at this happy consummation, and even you will enjoy the situation in the knowledge that each of those exhibits dangling from your hoofs is labelled with the blessed words, "Champion Class Gold Medal."

* * *

There are within reach of all of us many simple plans like this for securing happiness. Personally, it is a great comfort to me to hang up one of my prints on the wall, put a label on it pricing it at one thousand guineas (or even pounds will do at a pinch), and then cover it all over with little red wafers to indicate the number of times it has been sold. Wafers are cheap enough. Yet how much gratification they can afford!

THE WALRUS

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PHOTOGRAPHY. OCTOBER 13TH, 1908.

PHOTOGRAPHY

A JOURNAL FOR EVERY CAMERA USER.

EDITED BY R. CHILD BAYLEY.

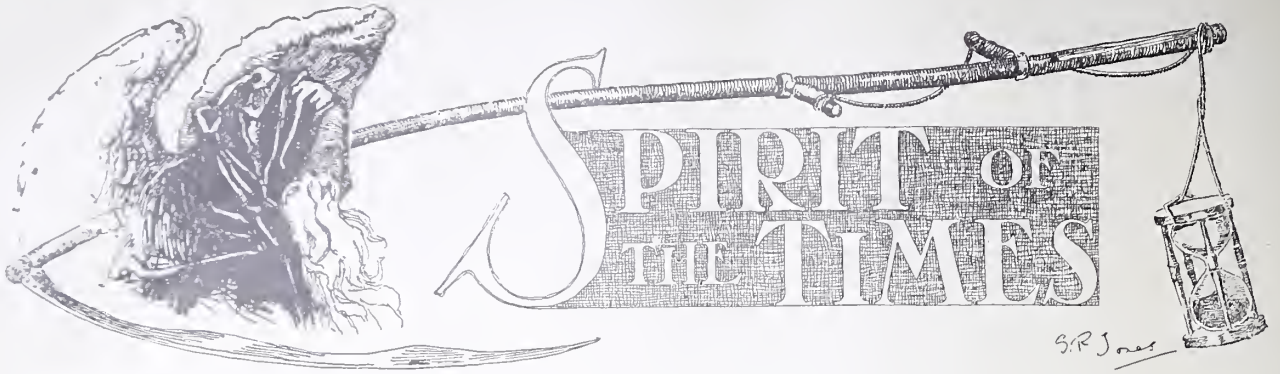
PUBLISHED WEEKLY.

OCTOBER 13TH, 1908. TUESDAY, No. 1,040. VOL. XXVI.



SPRING.

BY JOSEPH MASON.



Avoid Hurry.

Undue haste must be responsible for a tremendous list of photographic failures, for the temptation to see one's results is a great one, and photographic operations are things which on no account must be hurried. Alertness, ability to seize the flying opportunity, is a great thing in hand camera work, and he who deliberates in the hope that a good subject may become even better will often lose the chance of getting it at all; but, when the plate has once been exposed, "take time" should be the motto. Time to develop it properly, not under makeshift conditions to see how it has turned out; time to fix and wash it thoroughly; time to let it dry; time to make the best possible print from it when it is dry. There is no photographic process in which haste is not injurious to the result; nor does the man who rushes through the largest quantity of material have the largest number of successful prints to show, but often the direct opposite.

A Warning to Advertisers.

So many amateurs avail themselves of the sale and exchange columns of *Photography and Focus* for selling their surplus apparatus, that certain unscrupulous people seem to have turned their attention in the same direction and have victimised advertisers therein, or have attempted to do so. Only a few weeks ago we published an account of how a Kingston-on-Thames advertiser was robbed of his camera. We have just received another letter from Kingston, this time from a member of the legal profession, upon whom a similar attempt was made, fortunately without success. Recognising the important part amongst amateur photographers which the small advertisement section of the paper plays, we leave no stone unturned to protect our readers, and wish to have details of such transactions as soon as ever they take place. In the meantime, we caution all those who have transactions with strangers not to be misled by a plausible manner or respectable externals, and whenever possible to avail themselves of the deposit system which the publishers of the paper have organised for their express protection. Then there can be no risk of loss.

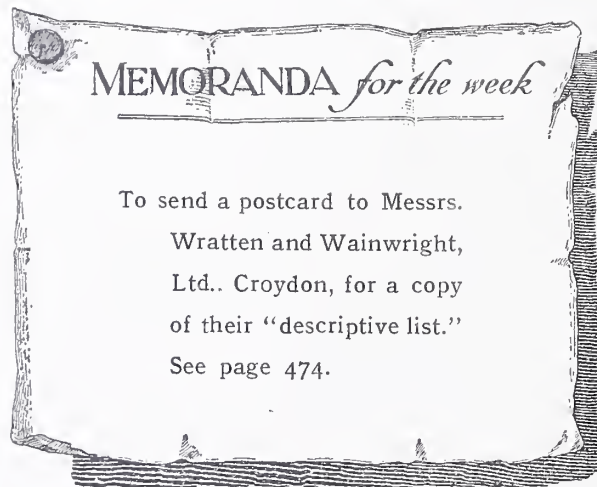
Drying Negatives.

Now that the time of year is approaching when the moisture in the atmosphere is at a maximum, a word of caution as to the drying of negatives may be seasonable. The gelatine film of a negative is most liable to injury while it is wet. Not only is it most exposed to mechanical injury, from its soft tender condition; that is sufficiently obvious not to need pointing out. What is equally true, but not quite so self-evident, is that while in that condition it is most prone to chemical injury. The gelatine if kept moist long enough will decompose; in fact, decomposition commences within an hour or two, although at first the action is only very slight, and may be ignored. Chemical dust settling on a wet film, if soluble in water, is quickly absorbed, and may work irreparable injury; on the dry film it might do no harm at all. Even if no dust gets to it and decomposition does not set in, the negative may be injured from the formation of drying marks. For all reasons, therefore, when once the negative is fixed and washed, the sooner it can be dried—without heat—the better.

A warm room is the best place in which to dry negatives in autumn or in winter. They should be kept well apart; the ordinary draining rack is quite useless for the purpose, as its grooves are much too close together. If the plates after draining are stood upon a shelf, in an almost vertical position, there is not much risk of dust settling on them, and they should dry in a very few hours. Some workers advocate standing up the plates with the film side underneath, on the ground that in this way they are less likely to gather dust; but they certainly do not dry so quickly; and there should not be enough dust about in any ordinary room to hurt plates placed as we have described. Roll film negatives are, of course, best dried by merely pinning them up singly or in lengths, so that the air has free access to both sides.

Dusty Shelves and Wet Negatives.

There is just another word of caution to be given while we are on this topic. The shelf should be dusted



before the negative is stood upon it. If a plate with its film wet has its bottom edge put upon a dusty shelf a curious phenomenon can be noticed. The dust will rise on the film for half an inch or more, and as the negative dries, it will of course be firmly fixed there. On examining the dry negative the fact that the dust has actually been sucked up, as it were, will be most clearly apparent.

LOVE'S LABOUR LOST.

If Jimmy Jobson comes your way,
Don't try to jest with him,
Nor dig him in the ribs, nor say,
"Hullo! how goes it, Jim?"
But be as gentle as you can,
For Jim's a disappointed man.

He got a picture in the Spring,
And oh! his joy was great.
It was a most delightful thing,
And so we told him straight.
And Jim declared he'd do no less
Than get it in the R.P.S.

So simple bromides first he tried
Of every make and grade.
But still he wasn't satisfied
With any print he made,
Opining, as he viewed each one,
'Twas not the best that could be done.

He made dry-plate transparencies,
And many a shilling spent,
But even with the best of these
He could not be content,
So flew to carbon, which, till then,
He'd left to more experienced men.

He laboured long and weary weeks,
Till he achieved his aim.
The bloom of health went from his cheeks,
The vigour from his frame.
He only hoped that he might live
To make a large-sized negative.

His health and cash were almost gone
When August came along.
But still he worked and struggled on,
And still he sang his song,
"I won't be satisfied unless
I get it in the R.P.S."

Six long and strenuous months had passed—
J.J. was nearly beat.
He got his picture done at last,
And crawled to Charlotte Street,
Only to find, to his dismay,
Entries had closed the previous day!

To Makers of Lantern Slides.

The annual lantern slide competition of *Photography and Focus* closes on Monday, October 19th. Already a number of entries are in, and everything promises a most successful competition. We should like to draw

the attention of our readers to one or two points wherein this slide competition differs from all others. One is that there is no rule as to "sets" of four or any other number of slides. The lantern slide is treated exactly as a print in any other competition is treated; it is judged singly on its own merits, technically as a slide, and pictorially for its artistic qualities. Another point is that only those slides which actually take awards are retained for circulation as a matter of course. Any others that may be selected for this purpose are paid for at the rate of half a crown per slide. The full set of rules and conditions, showing also the six classes into which the competition is divided, will be found this week on page 480.

New Colour Plates.

During the last few days we have had an opportunity of seeing some very good colour transparencies on the "Omnicolore" plates, which are announced as being put upon the market very shortly now by the Société Jougla of Paris. M. Jougla himself showed them to us, and informed us that they were obtained on plates made on a commercial scale. The colour rendering was very good, although a slight "lineness" was perceptible, the screen plate being made by a ruling method. The manufacturers announce that the issue of the plates has been delayed a little in consequence of the adoption of certain recently patented improvements, but that they will now be put on sale almost at once.

There are also to be seen on a table on the balcony at the New Gallery at Regent Street some specimens on the "Thames" plate. These are interesting as being obtained on a plate of British invention and British make. The colour rendering is not perfect, a bluish or greenish tinge being very noticeable, but the results are certainly noteworthy and suggest that the long expected competitors of the Autochrome at the present moment are at least several stages nearer their public advent on the market.

Autochromes at the Royal.

While on the subject of colour photographs we must note the general disappointment expressed with the Autochromes at the New Gallery. The method of showing them is admirable, far in advance of the arrangements last year; but the collection as a whole is quite remarkably poor. With the exception of two or three, the pictures are nothing like so good as many that were exhibited in the same gallery twelve months ago when the process was in its infancy, and the collection is one which cannot fail to give quite a false impression of the capabilities of the process. In fact, the Salon in this respect is far in advance of the older society.





Knife Retouching and some other Matters.

By H. Wild. Special to "Photography and Focus."



DOST photographers nowadays—at any rate those with leanings toward the pictorial—find it necessary to do a certain amount of handwork on both negative and print. It may be merely spotting, or it may be the wholesale removal of some obtrusive object, but handwork to some extent seems absolutely essential.

The great majority of photographers work only by increasing the density of the chemical deposit; that is, they work on the parts representing the shadows and darker tones on the negative with the object of making them print lighter, or they work on the lighter parts of the print. Now this works well enough when only one or two copies are wanted, but when a good number of replicas are required, or when ozobrome is being worked, it is much more convenient to do the greater part of the modification on the negative. This, of course, requires in many cases that some of the denser portions should be lightened instead of darkened, and the neatest and most effective method of doing this, especially for small areas, is with the knife. This is really nothing like so difficult as is generally supposed, the whole secret being in the choice of a proper tool and sharpening it the proper way.

The best tool, I find, is one of the so-called pen-nib print trimmers. As a matter of fact they are French vaccination lancets, and are made of exceedingly fine steel, and when fitted firmly into a penholder make a most useful piece of apparatus for many photographic purposes, though a trimmer sharpened for scraping negatives should not be used for anything else.

The trimmer has two cutting edges; only one of these is of use for scraping, and that is the one on the right, as it is held point upwards with the bevelled side towards the holder. This edge is rubbed on an oilstone or hone (the best lubricant for the stone is a little vaseline) in just the same way as sharpening a chisel, but with this important difference: If one was sharpening a chisel, after rubbing down the bevelled side it would be turned over and, laying it flat on the stone, given one or two rubs to take the burr off. This is just what must not be done with the trimmer, for it is this burr that constitutes the cutting edge.* To use it, it is held nearly edge-ways on the sharpened edge, but with the flat side inclining towards the negative, and successive strokes are made towards the user. It is

Comparative examples showing the use of the knife for improving a negative.



Fig. 1.



Fig. 2.

first tried on the edge of the negative to get the best angle at which to hold it, and I think one will be surprised at the ease with which quite perfect little shavings can be taken off. Anyone who has ever tried the usual way of scraping with a lancet sharpened to a razor edge, I think, will appreciate the advantages this method offers. It is easy to manage, and the edge keeps in good condition for a reasonable time. With the old way it was none too easy to get the very keen edge required, and, when obtained, it did not keep in order for more than a few strokes.

The two comparative illustrations will give some idea of the usefulness of scraping. I had just about what I wanted in arrangement when, just at the critical moment of exposure, a puff of wind blew the dress out on the left, as shown in fig. 1. Fig. 2 shows this obtrusive piece of material scraped out, and it will give some idea of the facility with which this can be done if it is noticed that it has been scraped in between the leaves, etc., that project over the dress. The little patch of white sky, it will also be observed, is taken completely out. There is no subsequent blacklead work on the scraped negative or any handwork on the print.

There is one rather important point I should mention, and that is, if the work is done on a retouching desk by light reflected from white paper, the opacity is deceiving. One may scrape down a spot to what seems to the eye a perfect match with its surroundings, but when printed it will be found to print too light. The reason of this is that the knife leaves the scraped part with something of a ground-glass texture. There is also a surprising difference in contact printing and enlarging. A patch that matches up perfectly when printed by contact will come much too light when enlarged direct. The best way to get over this is to match up as well as possible and then to varnish the negative. This generally makes things about right. If there is any doubt whether enough has been scraped away, a dab of retouching medium will answer almost the same purpose. Then if more scraping is seen to be necessary, the medium can be wiped off with a little turps and the place worked on afresh. When resharpening the trimmer, the flat side should first be given a rub on the stone to take off the old burr, and then one should proceed as at first.

There is another method of reducing over dense portions that is very useful at times. It is more suitable for larger areas than the knife, though quite small spots may be treated; but it does not work so cleanly up to the extreme edges. The material used is ordinary Globe

* Instead of an oilstone a little very fine emery or knife polish and oil may be spread on a piece of plate glass (a cutting shape will do) and used as a stone.



In our issue for September 8th, 1908 (page 363) we gave a version of this well-known Liverpool view, by Mr. J. Wallace Anderson. In that picture the clear cut outline of the building showed its aspect under one set of conditions. In the version of the same view which we print above, which is by Rev. H. W. Dick, we get a rendering noteworthy for its fine atmosphere and generally harmonious character.

polish. For use on a fairly large spot it should be thinned with a little sweet oil and applied with a piece of soft flannel. For smaller spots and lines, a piece of soft cork cut to shape works well, and for still smaller spaces the end of a wooden match sharpened to a blunt point. A little oil on the negative is sometimes of advantage. When finished, the negative can be cleaned with a little petrol or benzine. The Globe polish works very smoothly, and with ordinary care there is no sign of scratchiness. I have often used it successfully to rub down an over-dense spot on a lantern slide.

There is a little knack in folding a piece of flannel or linen for rubbing down. When a fair-sized area is to be operated upon, almost any way, provided it gives a smooth surface to rub with, will do, but for smaller places a special method of folding must be used.

A piece of soft flannel three or four inches square should be taken and folded in half, and then in half again, making a square of one and a half or two inches. It is then folded diagonally, taking care that what was originally the centre of the piece of stuff forms one end of the fold, which, when again folded, forming a narrower triangle, will give a fairly sharp but soft point, stiff enough to bear a reasonable amount of pressure. This sounds, I am afraid, rather complicated, but the actual folding will be found much simpler to do than to describe.

I have yet another means of reduction which is useful in a more limited way. It is not all I could wish, so I give it in the hope that someone may improve upon it. It is the

use of abrasive pencils, which I make by mixing fine pumice powder with melted paraffin wax and casting into sticks. They can be sharpened to a chisel point, and will take out quite fine lines and small spots, but they have this disadvantage—they scratch a little. In many cases this does not matter, but in some it does. I have tried other substances instead of pumice, but up till now without success. I had great hopes of rouge, but find that it is too fine and will not “cut” at all. It is here I think some reader may perhaps be able to help by suggesting some substance not quite so soft as rouge or as gritty as pumice. The easiest way to cast the sticks is to make cases by wrapping paper round a pencil, closing one end (just like making cases for fireworks, in fact). These are stood upright in holes in a piece of wood and filled with the hot mixture. When cold the paper can be peeled off. In using these sticks, the place to be reduced should be kept moistened with turpentine.

In conclusion, I would like to advise all pictorial workers to try the pen-nib trimmer, to try on a waste negative first, and to be careful to hold the nib at just the right cutting angle. This done, it is easier than retouching with a pencil; in fact, there is a great temptation to do too much—it works so “sweetly.”

“THE BIOSCOPE” is a weekly periodical, published by The Bioscope Press, at 170, Fleet Street, London, E.C., price one penny. As its name denotes, it deals with kinematography, and gives a great deal of information of importance to those interested in this form of public amusement.



W. L. F. WASTELL.

BY JOHN SMITH.

The original of this picture is No. 2 at the Exhibition of the Royal Photographic Society



A CRITICAL CAUSERIE.

By "The Bandit"

Concerning some Photographs by Beginners.

"Critics!—appalled I venture on the name,
Those cut-throat bandits in the path of fame."—BURNS.

ILLOGICALLY, perhaps, and perhaps prudishly, British photographers as a whole have never considered that picture making from the nude was a promising branch of their art. From time to time very fine solitary examples of nude figure-pictures have been hung at our exhibitions; but the almost inevitable afterthought which they call up, of the necessary preparations, the studio, the camera, and so forth, are for some reason distasteful to us as a nation, although paintings of these subjects arouse no such banal reflections. I am neither on one side nor on the other in this perennial controversy. I merely allude to it here because I have noticed that numbers of pictorial or would be pictorial photographs fail in their aim for precisely the same reason that the nudes are prone to fail. They fail because an inspection of them has the effect of sketching, on our mental retina, a phantom image of a photographer, twiddling the focussing screw of his camera, fussing his sitter or subject into fresh poses, getting out his dark slide, and finally squeezing his pneumatic bulb—in short, the picture immediately causes us to think of its maker rather than of itself.

Photographs which emphasise the



"Times please."

photographer—that is what these pictures are. And the photographer ought to be as modestly invisible in his photograph as the stage manager is in a play or the author in a book. We may note his mannerisms cropping up here and there, we may read him in his style, we may recognise the work as typical of him—as one recognises Meredith in a Meredith novel, or Shaw in a Shaw comedy—but no intruding vision of the labouring composer himself, pen or camera in hand, should distract our attention.

Do I make my meaning clear? Let me turn to a few illustrations. Here is a very obvious one called "Time, please." It does not set up to be artistic, but it seemingly claims to be true. Is it? No. It is not true; because it reveals the presence of the photographer. Because the photographer was there, the principals are ludicrously cramped. They couldn't box, in this space, to save their lives. Every one of them is conscious of the camera; and what with their woodenness and their crowdedness, they make us conscious also. The photograph is

not a technical but an artistic failure. Odd, isn't it, in a work which has palpably no artistic aims whatever?

It is chiefly in portraits and groups, and genre pictures generally, that the "show is given away" by the haunting flavour of the photographer; but there is no reason why this should be so. Look at "Portrait of M.W."—you could swear that no photographer was in the room with this young lady. She is profoundly natural, intensely absorbed in her book, posed with a lack of "posing" which results in a life-likeness almost startling in its completeness. With all its faults this is one of the best portraits which has passed through my hands since I began my Causeries. I reproduce it as a model of what a naturalistic portrait should be. It is useless to tell me that the top of the sitter's head ought not to have been sliced off, that her left hand is too big, that the glimpse from the window is ugly. All these imperfections are swamped by the supreme merit of the unobtrusiveness of the photographer and his disillusioning apparatus.



Tulips.

By Frank Slater



Portrait of M. W.

By Alfred K. Wells.

"The Brains of the Firm" is another capital example—if a less striking one—of a parallel success. It is interesting in another respect. Close to the floor in front of the desk a ghostly face is to be described, and is presumably due to a double exposure, or to the unnoticed presence of a third party, though spiritualists of the Archdeacon Colley school might claim it as a psychic manifestation. Materialistic camera users recognise it as an all too common phenomenon of their craft; and thus, curiously enough, this picture draws attention to its photographic origin after all. A photographic, a technical, blemish of this nature betrays the photographer as surely as does an artistic one such as that indicated in my criticism of "Time, please." But the technical slip is not so fatal as the artistic one; the former will probably only be "spotted" by photographers, the other is patent to all who have eyes.

Photographs which emphasise the photographer are not necessarily portraits and groups. Here is a still life called "Tulips" which falls into just the same category. How camera-conscious it is! Look at the carefully draped curtain, the vase of "arranged" flowers—arranged to look haphazard! One sees the camera pointing at them; one sees the aspirant with his head under the focussing cloth. A glance at

"Tulips" gives us the whole tableau, and simultaneously spoils our apprecia-



The Brains of the Firm. By A. W. G. Chilver.

tion of the picture by making us think of the way it was created.



The Bend of the Stream.

By F. Green.

"The Bend of the Stream" is a postcard landscape spoilt not unsimilarly. The reproduction may convey the impression that the original is mounted; it is not mounted, but masked with a white border, and outside the white border is a neat vignette of fog-shading. What pains have been taken to present the picture attractively! And behold, we are promptly more interested in the pains the photographer has taken with his printing than in the print's subject! Far be it from me to discourage care in get-up, or to excuse slovenliness; but there is an art in simplicity, you know, as well as in punctiliously-advertised skill. The picture itself is a simple one. It would never have made us think of the photographer. Why then does he insist on reminding us of his existence by masking it and vignetting it with a showiness which makes his drudgery positively ostentatious? A quiet mount would have been all that was needed; but this meticulously exact shading is as obtrusive as a pattern of curlywigs all round the picture would have been.

In contrast to "The Bend of the Stream" consider "Shadows of the evening steal across the sky." The latter isn't half as good, technically, as the former, yet in looking at the latter we are never tempted to re-

collect either the camera or the printing frame. The picture "puts on no side"; it is as honestly unaffected as the hymn from which its title is naively quoted. Yet by printing this as "The Bend of the Stream" is printed, an element of artificiality might have been introduced which would have caused both picture and title to ring false.

The point is a subtle one, and I hope my readers will not think that I am making too much ado about it. I hold that it is worth dwelling on, for we photographers are unduly fond of embellishing our photographs by



"Shadows of the evening steal across the sky."

By W. H. S.

little tricks and flourishes which verge on the vulgar and which result in the mounting, or framing, or printing, or what not, attracting more attention than the idea we have to express in the picture itself. These garnishings impress us, as photographers, because we know the skill they represent.

Non-photographers will be found to be indifferent to them, and rightly so. They simply wonder at our admiration of this or that picture, which is what we call "a marvel of technique," but artistically is as empty as a balloon. The picture's the thing; and don't let us forget it.

When the Beginner Should Begin. By G. H. W.

Special to "Photography and Focus."

CIRCUMSTANCES—and custom—decide, in most cases, that the beginner in photography shall first procure a camera, and afterwards acquire experience and comparative mastery of its mechanism and of the many photographic processes by steps that are slow and wastage that is wanton.

In approaching photography at the mature age of thirty, however, I dispensed with the impetuosity of youth, and decided that a course of general "reading up" on the subject should precede any outlay on equipment of any kind. As the advantages of this method of approach seem so great, a few jottings may be interesting, as advocating a course that amateurs might wisely recommend to their "beginner" friends.

Once let it be decided that the hobby shall be taken up, the first thing is to begin a general survey of the subject. This is by no means a dry proceeding. Let *Photography and Focus* be taken weekly, and its pages studied, both as to cameras and lenses, and the articles on pictorial composition, development, and printing. If more abstruse glances into the subject are desired, the local free library will furnish one or two text books which may be up-to-date, but in any case, will give some general information of a certain value. (One need not study wet plate photography, for instance.) The weekly study of *Photography and Focus* will soon put into some sort of shape whatever ideas may be held as to the most suitable form of camera. Booklets (which a postcard will bring) afford a good idea of the qualities of lenses, plates, papers, etc., and such booklets give, in many cases, information that is of greater practical value than that found in the library text-books. For instance, a booklet issued by a firm of lens makers, and one sent by a dry plate manufacturer, not only decided that this should be—for me—the lens and these the dry plates, but the hints given in each case were found of much value.

The local photographic dealer, too, proved of good service. Once it was made clear that at some future date an order for a camera and supplies would be forthcoming, it seemed a happiness for the said gentleman to acquire, for my sole benefit, sundry printed epistles in the shape of circulars, leaflets, and pamphlets, not forgetting a comprehensive catalogue, on the cover of which my friend's name was duly imprinted.

By the end of six months my photographic knowledge was fairly wide, theoretically. I knew the significance of aperture without ever having used an iris diaphragm, and had already seen the wisdom of sticking to one variety of plate, and of making notes of every plate exposed, and also of every plate developed.

My outlay on camera and lens was as much as I could possibly afford. In this I differed from those who advocate the "step by step" method of starting with an inexpensive camera and a not very excellent lens. My lens was one of the best, and will always be worth a good proportion of its cost. I had a tripod, focussing screen, metal slides for plates, and a folding pocket camera with the usual acces-

sories, including a combined exposure notebook and diary, which served me well. From the first I got good pictures, and my good results can best be attributed to the inverted method of approaching photography by first acquiring an interest in it and studying its various phases, and secondly taking the plunge into its practice.

If I were to dogmatise, I should say that anyone who tries this plan of looking round the subject for about six months without finding it interesting had better give up the idea of having a camera for serious photography.

Study first, then spend by the light of that experience.

The present moment should be the starting time for next year's beginners.



"Prudence."

By H. G. Drake-Brockman, M.R.C.S.

Discoveries Due to the Camera.

How Sir William Huggins was able to Study Radium.
AN EXPOSURE OF 216 HOURS AND THE RESULT.

SOME few months ago (*Photography and Focus*, May 12th, 1908, page 10) a description was given of the way in which the camera was used to enable astronomers to learn the nature of stars, which, but for the sensitive plate, would remain unknown, since the light which reaches the earth is too weak, after it has been spread out in the spectroscope, to enable the unaided eye to read its message. In this article we will deal with another application of the same useful tool, this time applied to investigate a terrestrial substance—the remarkable and much talked of radium.

One of the most extraordinary properties of radium is that its molecules, and those of its salts, are constantly giving off energy in several forms: (1), α positive ions; (2), β rays—negative electrons like the cathode rays; (3), γ rays, which are similar to the Röntgen rays; (4), an emanation, it would seem, a new gas; (5), heat rays in the infra red, since radium bromide maintains a temperature about 1.5° C. above that of surrounding objects. Moreover, the salts of radium are faintly luminous in the dark. A substance possessing such unique characteristics was made the subject of the most painstaking examination in every way. Sir Wm. Huggins, whose spectroscopic investigation of the stars has added so greatly to the world's knowledge, determined to apply the spectroscope to radium also.

Since radium is itself luminous, it would seem at first sight to be a very simple matter to examine it in a spectroscope, just as one might examine a dark room lamp; but this is not the case.

To start with, radium is only to be obtained in most minute quantities, so that even if it were strongly luminous, it would be difficult and costly to get enough of it for anything to be seen in the spectroscope, while, as a matter of fact, instead of giving out a powerful light, its luminosity is nothing more than a feeble glow. Faint as it was, it was not so weak as to deter Sir William Huggins from his attempt. He knew from his experiences with the stars that, given time enough, the faintest light would impress itself on the plate. We cannot do better than give the account of what happened in Sir William's own words, in a letter written recently to the Editor of *Photography and Focus*:

"It seemed to me in 1903 that the glow [of radium] might be due to the violent disruptive molecular changes. So I set myself to photograph the spectrum of this faint glow, making use of a quartz spectroscope I had specially constructed for very faint celestial objects—a compound prism of two prisms

of 30° of right-handed and left-handed quartz respectively, and quartz lenses of large angular aperture.

"After an exposure of twenty-four hours faint traces of two bright lines appeared on the plate. With an exposure of 216 hours the photograph [reproduced in No. 1, fig. 1] was obtained. To my surprise the lines were not those of radium, or hydrogen, or helium. They formed the negative band spectrum of nitrogen. The result of many experiments showed that they were due to the nitrogen of the atmosphere, stimulated into luminosity by the bombardment of the α rays."

This was the first time such a spectrum had been obtained without an electric discharge. Reproduced below it are two spectra of nitrogen obtained by means of the electric discharge, and the slightest glance at the lines in the three illustrations will be sufficient to show that they all originate with the same substance. That substance is nitrogen. The real spectrum of radium obtained with the electric spark is shown in fig. 2, and can be seen to be quite different.

The glow then, although caused by radium, is actually glowing air, or rather glowing nitrogen, as was proved by the photograph which had over 200 hours' exposure. The true spectrum (fig. 2) is the spectrum of an induction spark, with capacity, taken between platinum electrodes which were moistened with a solution of radium bromide. Some of the faint lines in this spectrum are due to barium as an impurity, and a pair of close lines to a trace of calcium.

The spectroscopic examination of radium must have remained unknown but for photography. An extensive description of it was laid before the Royal Society in four papers by Sir William

and Lady Huggins, Sir William in this as in his stellar work having had the active co-operation of his wife. We are indebted to his courtesy both for the details given in this article and for permission to reproduce the spectra on this page.

CHRISTMAS MOUNTS AND CALENDARS. The Crown Photographic Manufactory of Rotherham have sent us a collection of samples of mounts which they have prepared for the Christmas trade. They include a number of very tasteful design, and are supplied at prices which are eminently reasonable. Assorted packets are supplied at 1s., 2s., and 3s. post free and a leaflet price list has been issued. The company also make photographic calendar mounts and adhesive gilt mottoes for attaching to ordinary mounts, so that they can be used to convey seasonable greetings.

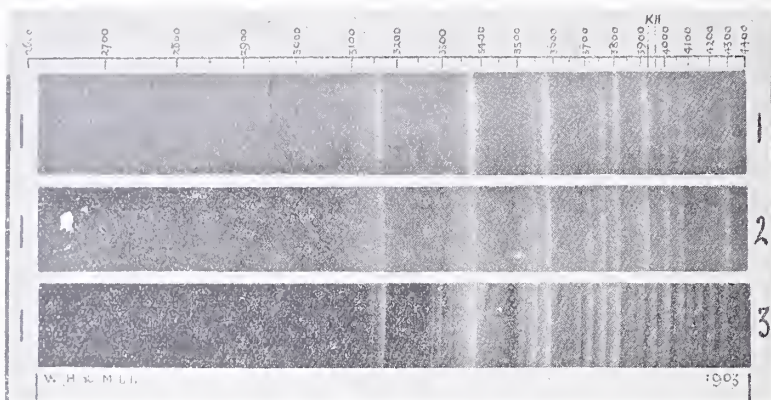


Fig. 1.

- 1.—Spectrum of radium bromide.
- 2.—Negative band spectrum of nitrogen.
- 3.—Positive band spectrum of nitrogen



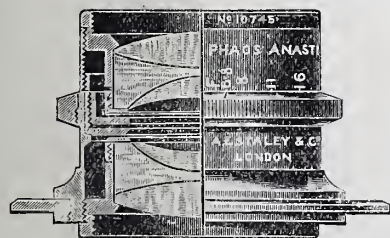
Fig. 2.—The spark spectrum of radium.



THE LATEST IN APPARATUS & MATERIAL.

Report of our Tests of Staley's Phaos Anastigmat.

THE lens which is illustrated below is the latest anastigmat to be issued by Messrs. A. E. Staley and Co., of 19, Thavies Inn, London, E.C., and named by them "The Phaos." As can be seen by the illustration, it is composed of two combinations of a symmetrical character, each consisting of three lenses cemented together. It is well known that this arrangement is one which may not only be made to give a very perfectly corrected complete



lens, but also one each of the components of which acts most efficiently as a single combination of about twice the focus of the doublet. In getting such a lens, therefore, we examined it very critically to see whether it possessed the high

quality of which we knew the design to be capable.

As there are a large number of our readers who are interested in the result of our tests, although they may not care to have it set forth in detail, we may summarise it for their benefit by saying that the "Phaos" proved itself to be an excellent all-round instrument, such as would do admirably for a very rapid hand-camera lens, and equally well for

architectural work, copying, and other branches where its freedom from distortion would be of value. We cannot think that anyone purchasing a "Phaos" lens would be likely to regret it, or to think that he had got anything but a decided bargain.

To come down to details, the lens sent us was a 7in. one, made to cover a plate 7×5 inches and to work at f/6.8. As a matter of fact the effective aperture of this particular instrument proved to be f/7.4, but the other stops were accurately marked. At full aperture it proved to have a perfectly flat field over the whole area of the plate it was made to cover, and would allow of the rising front being freely used. Its correction for both chromatic and spherical aberration was all that could be desired, and it was remarkably free from astigmatism. The cementing of the combinations reduces the total number of glass-air surfaces to four, and no doubt makes the elimination of flare comparatively easy. Certainly we could find no trace of it. The definition all over the plate at full aperture was beautifully crisp and good, and the mechanical details of its construction such as the mounting, the centring, the workmanship of the iris diaphragm, etc., were well carried out, the whole of the metal work being very nicely finished.

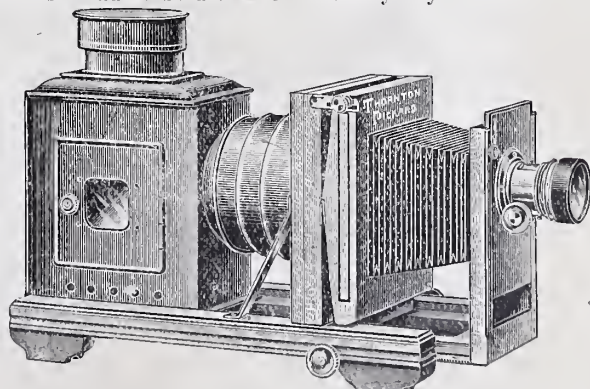
We have no doubt said enough to show that in the "Phaos Anastigmat" photographers have a very excellent instrument, and one which is obtainable at a most reasonable price. Can they want more?

The Thornton-Pickard Co.'s Ruby Enlargers.

THE manufacture of enlarging apparatus is a new departure for the Thornton-Pickard Co., and to judge from the specimen of their work which has been sent us for inspection, is one which should prove very successful. Certainly the "Ruby" enlarger Model A is a very well designed and well constructed piece of apparatus. Its general appearance may be gathered from the illustration below, though the enlarger we saw differed in some respects from the illustration, being fitted with a duplex oil lamp and tall chimney, and being without the strut to the condenser holder.

The lantern body is made of corrugated Russian iron, and in the case of the square body pattern is fitted with a hinged side door for attending to the light. This body is connected up to the condenser frame by a telescopic arrangement to allow of an ample movement for the adjustment of the position of the light. The arrangement of condenser and negative carrier deserves special mention. The two are not in one piece, as has been customary, but the frame which holds the condenser is a fixture, while that which carries the negative is shaped so that it will swing on centres from the condenser frame, and so allow the negative to be tilted, when

this is found to be desirable to remedy any distortion in it.



The two parts are connected by means of a short bellows of light-proof material, and the swinging negative holder has

an arrangement by which it can be clamped at any angle. The extension of the front, carrying the lens, is effected by means of a rack and pinion, and the makers point out that in the case of their apparatus, the rackwork is arranged as in a camera, and not *vice versa*. That is to say, when the pinion wheel is turned forwards the front is racked out, and when backwards it racks in. The front panel of the enlarger has a rising and falling movement, and the bellows are made of good quality leather. The baseboard, stage, and front are of polished mahogany, are well finished, and all the adjustments are made very smoothly.

The price of this model complete for quarter-plate size, with a 5½ in. double plano-convex condenser, enlarging portrait lens with rack and pinion, iris diaphragm and orange glass cap, is £4. Another model, "B," is made, in which there is no rocking frame, bellows or lens, the user's own camera taking their place. The price of this for quarter-plate is £2 15s.

The quarter-plate is the only size at present ready, but 5 by 4 and half-plate are announced as being on the market very shortly.

Marion's Motto Mounts for Christmas.

It is a source of surprise to many people who are not brought into actual contact with an industry when they learn how far in advance things have to be prepared for different season's trade. Here we are writing with a hope that the summer is not quite gone, yet our topic is provided by a box of mounts of all kinds, which has been sent to us by Messrs. Marion and Co., Ltd., of 22 and 23, Soho Square, London, W. The mounts are of most varied character, but are all made with one object in view, to serve as Christmas or New Year cards when the sender has fastened one of his photographs on them or has inserted it in the place provided. Both "paste on" and "slip in" mounts are well represented, and amongst the many, every kind of photograph can be provided with a suitable setting, and every variety of the season's greetings are to be found.

Where there are so many, it is difficult to single out any particular one for special notice, but one or two may be

briefly described as typical. One is known as P23. It is a dark grey, two-fold, paste-on mount for a C.D.V. print, with a red seal in relief, and the word "Xmas." Inside this folder is a plain white card with a raised line and roughened edges on which the photograph is mounted. This particular mount sells at 1s. 6d. per dozen. Many of these mounts are designed to take circular photographs. A handsome mount for quarter-plate prints, the most costly in the whole collection, by the way, sells at 3s. 8d. per dozen, and is known as P44. It is of the paste-on type, and is of dark brown card externally, a cameo head in cream colour decorating the top left-hand corner. Within is a two-fold ivory card, silver grey, with a plain plate mark, the whole thing neatly corded to make a little book.

Many of these cards cost no more than 1s. or 1s. 2d. per dozen, but are none the less very neat and tasteful in design, and are certain to prove most popular.

Sound Advice to be got for the Asking.

THE value of advice depends upon the giver, and the particular advice to which our heading refers may be taken upon this basis as of the very best. It is given by Messrs. Wratten and Wainwright, Ltd., which in this case no doubt stands for Dr. Kenneth Mees; and Dr. Mees, as our readers know, is one of the very few of modern scientific men who have specialised in photography. The form in which this information is given is in a booklet of thirty-eight pages, modestly entitled a "Descriptive List," but it is really much more than this. It contains a number

of useful hints and much sound instruction on photographic matters, written so that the merest beginner can understand all that is for his benefit. The instruction is up to date; it is not a rehash of formulæ which are as old as the hills and quite as tiring, such as forms the basis of so many "guides."

We would strongly advise those of our readers who are not above learning something of the materials they use to drop a line to Messrs. Wratten and Wainwright, Ltd., Croydon, asking for a copy of the "Descriptive List." It can be had post free for the asking.



The Week's Meetings.

MONDAY, OCTOBER 12TH.

Bedford C.C. "Lantern Slide Making" W. N. Blake.
Bradford G.S.P.S. "The Field Days of a Sun Artist." P. Lund.

TUESDAY, OCTOBER 13TH.

Nelson C.C. N.E. Railway Slides.
Hull & C.C. "Portraiture." H. Crossley.
Hackney P.S. "Carbon Demonstration." The Autotype Co.
Kewghley & D.P.A. "Egypt." J. J. Bullg.
Glasgow Southern P.A. "The Oil Process." S. Robertson.
Leeds P.S. Social Evening.
Govan C.C. Opening of Winter Session.
Bolton A.P.S. "Preparing the Exhibition Print." T. Lee Syms.
Birmingham P.S. "Oil Pigment Printing." J. H. Gear.
Kinning Park Co-operative Society "Biomicil." W. C. S. Ferguson.
Rochdale A.P.S. Presidential Dinner.

WEDNESDAY, OCTOBER 14TH.

Stockport P.S. Annual Meeting.
G.E.K. Mechanics' Institution. "Development" H. W. Bennett.
Leeds C.C. "Gloucester Cathedral." Harold Baker.
Wimbledon Park P.S. "Development of Dry Plates" H. W. Matthews.
Ashton-under-Lyne P.S. Committee Meeting.
Acton P.S. Social Reunion.
Croydon C.C. "The Autotype Carbon Process" A. C. Braham.

Societies will have their meetings announced here if the syllabus is sent to us at the beginning of the Session, or from time to time.

THURSDAY, OCTOBER 15TH.

Armley & Wortley P.S. "On the Fringe of the Austrian Alps." Chas. B. Howdill.
Handsworth P.S. "Astronomical Photography." Frederick Smith.
Liverpool A.P.A. "The Caucasian Alps." Herman Woolley.
L. & P.P.A. Annual Supper.
Melbourne C.C. "Holiday Slides." The President. "Old Printing Processes." L. W. Ayers. "The Lusitania and Mauretania." P. Fredk. Visick.
Richmond C.C. "Various Systems of Development" P. G. Payne.
Midlothian P.A. "Enlarging" Thomas Hadow.
Batley & D.P.S. "Retouching." John Way.
U. Stereoscopic S. U.S.S. Annual Competition.
Chelsea & D.P.S. "Chelsea Past and Present." S. G. Cooling.

FRIDAY, OCTOBER 16TH.

Colne C.C. "The Yorkshire Coast." A. Smith.

SATURDAY, OCTOBER 17TH.

Blackburn & D.C.C. Exhibition of Members' Work.
Govan C.C. Renfrew.
Chelmsford P.S. Great Baddow.

MONDAY, OCTOBER 19TH.

Bradford P.S. "Some Mountains and Glaciers of Switzerland." A. E. Hassé.
Stafford P.S. Velox Paper. W. F. Slater.
Bradford G.S.P.S. "Sunny Memories." Rev. E. A. Miller.

Special

to

"Photography
and Focus."

The Reduction & Intensification of Bromide Prints.

By C. Harold Smith.

Reliable processes for the improvement of the prints both in vigour and in colour.
Full working details are given.

PART II. INTENSIFICATION.

The Reduction of Bromide Prints was dealt with on pages 449 and 450 last week.

THE question of permanence applies more when intensification is considered than in the case of reduction, as here something is to be added to the image. A bromide print can be intensified by the ozobrome method—that is, by adding the carbon image on the top of the silver one, and

redeveloping or sulphiding the final print. But it is not always convenient or desirable to use this system.

There is, however, another means of intensification that may be regarded as permanent, *i.e.*, as permanent as the original bromide print. I refer to the mercury-sulphide method. For four years I have used this for intensifying plates. No alteration has taken place in such intensified plates. But plates are not exposed to the same conditions as prints. In February, 1906, I treated a print in this way, cut it in half, and exposed the half to the full South African sun for over two years. There is no change whatever. This should be a very fair test for permanence.

BLEACHING BATH.

Mercuric chloride	...	60 grains
Potassium bromide	...	30 grains
Water	...	20 ounces

This bath may be used repeatedly. The bromide print must be thoroughly washed from hypo and dried before intensifying. It is then soaked in water until limp, and bleached in the above bath, following which it requires a very thorough washing before sulphiding. This is best carried out by rinsing after the mercury bath and soaking for ten minutes in a ten per cent. solution of common salt, washing for five minutes in several changes of water, and repeating with a fresh salt bath, washing again, and again repeating the salt bath. After a final washing for fifteen minutes the print is ready to be sulphided. This is done in the usual way in a weak solution of sodium sulphide; one half per cent. is quite sufficient (half the strength usually used for sulphiding bromide prints in sepia toning). After which the prints are rinsed well for five minutes and dried.

The reason for the careful washing between bleaching and darkening is that the paper and the gelatine film both hold the mercury solution persistently, and careless washing results in the darkening of the light portion of the picture, from which the free mercury solution has not been removed. With a slight washing the whole print will some-



A Merry Heart is a Purse Well Lined!

By Irene E. How.

times darken all over. With proper treatment I have never yet had a failure. In this regard it should be noted that bromide papers vary very much in surface. The more gelatine the more essential the washing. Semi-matt or carbon surface bromides require far more care than platino-matt papers.

The colour of the resulting prints is a brown-black of very rich appearance; the colour varies a trifle with different makes and textures of paper.

In making a weak enlargement, when intensification has been decided upon beforehand as necessary, it is well to see that the whites of the enlargement are not veiled; that is to say a short exposure should be given, and normal, not prolonged, development. Also, in cases when an enlargement is, on development, seen to be under exposed, normal development only should be given. Prolonged development of a bromide enlargement will veil the whites without doing good, and may probably produce stains. Intensification must be relied upon to build up the image.

Such intensified prints may be toned by the usual ferricyanide-bromide and sulphide method; the colour, however, is a much darker brown than that of the ordinary toned bromide. It should be noted that rebleaching of the mercury-sulphide image with the ferricyanide-bromide bath is not a complete bleaching. The brown-black image changes only to a brown one, which darkens again in the sulphide bath. Nor is such partially bleached image soluble in hypo as is well known to be the case with the ordinary bleached bromide print; for on immersion in hypo the image darkens again to a dark brown.

An intensified print may also be toned in the hot hypo-alum bath in the usual way.

Another method of obtaining an intensified and toned print, in one treatment, is by bleaching the original bromide print in a mixture of mercuric chloride and ferricyanide-bromide. The proportions must be carefully adjusted, as the bleaching seems to take place as though each bleaching agent acted on its own account, at the same time; consequently the strength of each must be adjusted so that one does not act too quickly for the other. The following proportion gives a rich dark brown tone with considerable intensification:

Mercuric chloride	...	...	25 grains
Potassium bromide	...	...	90 "
Potassium ferricyanide	...	...	40 "
Water	...	...	10 ounces

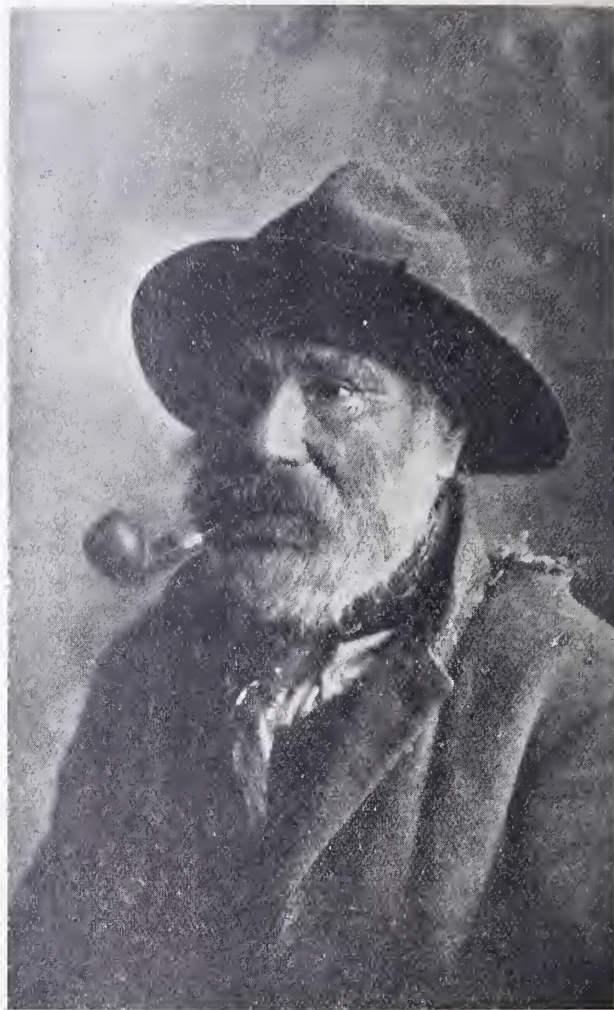
This bath must be made fresh before use, and will not keep.

A further addition of potassium ferricyanide gives a browner image, but the colour of the resulting print is liable to be a disagreeable one. Double the quantity gives a muddy mustard-brown with some papers. Also the browner the colour the less the intensification, and except a brightening of the print by intensification is required, this method is not worth while. The print in any case must be washed well with salt baths, as directed for ordinary intensification, and sulphided in the usual way.

As regards the permanence of a print treated by the combined method, my first tests of the process were made in September of last year. Since then, half of a print has been exposed to our full sunshine (South Africa); but on comparing it with the other half no change is visible.

While speaking of the mercury-sulphide method of intensification, it may be as well to add that for intensifying plates the method is slightly different. The average plate requiring intensification is of the under-exposed variety; the shadows and half-tones requiring the most intensification. The original development should in no case be pushed too far, as prolonged development merely darkens the high lights and tends to veil the shadows.

For the successful intensification of such a negative it is best not re-wetted. The mercury solution is



A PIONEER.

By W. J. CHAPMAN
(SOUTH AUSTRALIA).

Awarded Second Prize in the Beginners' Competition for July, 1908.

poured over it when dry, and allowed to act until the surface is just grey, this taking place in quite a short time. The plate is then rinsed quickly and placed in the salt baths just as a print would be, and it is finally darkened with the sulphiding solution, used weak as directed.

This method of intensification is very simple and clean, and does not seem to give the "pinholes" of the mercury-ammonia method. I find it to be very useful in the case of studio work where under-exposure has been a necessity.



WINTER SHOWERS.

The original of this picture is No. 43 at the Exhibition of the Royal Photographic Society.

BY S. E. WALL.



LA SERENADE.

BY A. AND M. E. BRACEWELL.

The original of this picture is No. 40 at the Exhibition of the Royal Photographic Society.

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ADDRESS.—All communications for the Editor should be addressed: The Editor, PHOTOGRAPHY AND FOCUS, 20, Tudor Street, London, E.C.

TO CONTRIBUTORS.—The Editor will be glad to consider original up-to-date manuscripts on photographic subjects. All contributions must be typewritten, or in very legible handwriting, on one side of the paper only, and should bear the name and address of the sender. Letters or communications arising out of matters already appearing in the paper are not paid for. The Editor disclaims legal responsibility for the safety of matter submitted to him, but he will endeavour to return rejected manuscripts, etc., when a stamped addressed envelope is enclosed for that purpose. No notice whatever can be paid to communications without the name and address of the sender, nor necessarily for publication.

PRINTS FOR CRITICISM.—Readers sending prints for criticism or advice are notified that in all cases it is understood that by so doing permission is given for their reproduction, without fee, in PHOTOGRAPHY AND FOCUS.

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PAYMENTS.—Articles and illustrations are paid for on acceptance.

INTERVIEWS.—The Editor will be at 20, Tudor Street, on Wednesdays, between the hours of 9.30 and 11.30 a.m., but can only be seen at other times by appointment.



INSTRUCTION IN PHOTOGRAPHY is given at the Blackheath Road L.C.C. Science School on Monday and Friday evenings. Further information can be obtained on application to the secretary at the school.

CAMERAS, LTD., of 84, Cross Street, Manchester, advise us that they have a clearance sale of stock-soiled cameras and accessories. It will last until October 19th, and contains some remarkable bargains.

THE TREATMENT OF RESIDUES. The well-known Paris publishing house of Charles Mendel, of 118, Rue d'Assas, Paris, has just issued a little work on this subject from the pen of M. L. Mathet. The book, which is entitled "Traitement des Residues Photographiques," deals concisely and thoroughly with its topic, in some thirty pages, and sells, in paper covers, at 60 centimes.

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HONOUR FOR A PHOTOGRAPHIC JOURNALIST. The director of "La Fotografia Artistica," of Turin, has recently been made a Knight of the Crown of Italy.

THE SUTTON (Surrey) Photographic Art Circle is a society now in formation. The honorary secretary *pro tem.* is Mr. L. G. Castle, Danetree, Sutton, Surrey, who will be pleased to send particulars.

THE EURYPLAN LENSES. Messrs. A. E. Staley and Co., of 19, Thavies Inn, London, E.C., send us copies of some excellent testimonials they have recently received from customers who are using these capital lenses.

AN EXHIBITION AT BRADFORD has been arranged in the Cartwright Hall. It consists of work by Bradford artists, past and present. In one of the water-colour rooms is an interesting collection of photographs by Mr. and Mrs. Bracewell.

PORTRAITS WITH THE DALLMEYER-BERGHEIM lens, by Messrs. Notman and Son, of Montreal, have been added to the exhibit of Messrs. J. H. Dallmeyer, Ltd., in the Fountain Court at the New Gallery. They are fine examples of straight photography, and hold their own well with the other portrait work at the exhibition.

"THE PRISM" for August contains an interesting article on the making of an anastigmat. This little publication is issued by the Bausch and Lomb Optical Co., and a copy will be sent by its London agents, Messrs. A. E. Staley and Co., of 19, Thavies Inn, London, E.C., to any reader sending a penny stamp to cover the cost of postage, as long as their supply holds out.

LANTERN SLIDES ON LOAN. Messrs. A. E. Staley and Co., of 19, Thavies Inn, Holborn Circus, London, E.C., advise us that they have two sets of slides—one of Dutch scenery and one of a journey from Paris through Chartres to Grenoble. The former is now ready; the latter will be ready in January. The slides illustrate the capabilities of the Euryplan lenses, and are made by Mr. E. C. Fincham. Early application is desirable.

FOR USERS OF SINGLE METAL SLIDES. Mr. Paul Olchin, of St. Petersburg, writes us as follows: "To prevent a double exposure on the same plate I stick to the front and back over the upper edge of the slide a long narrow strip of gummed paper (I use the margins of a sheet of postage stamps). Before opening the slide I cut across the paper strip with my nail. If the exposure was not made the closed slide is provided afresh with a paper strip. Sometimes my slides are loaded with different plates; this is noted on the preventive strips. The subject and the conditions can be pencilled on the same strips. A similar expedient can be applied on slides of other construction."



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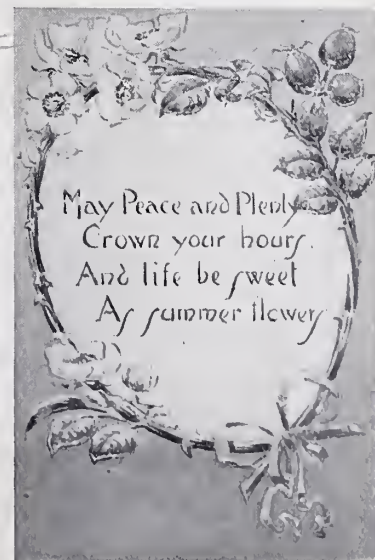
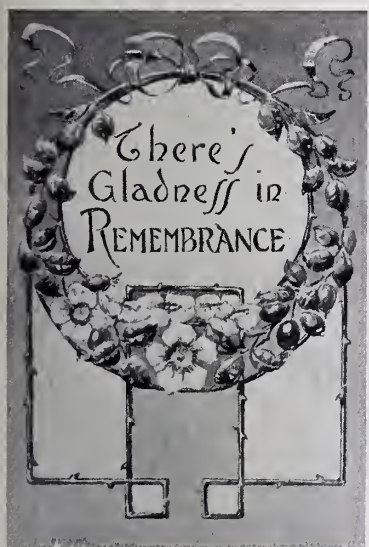
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QUERIES AND REPLIES

REGULATIONS.—(1) Envelopes must be marked "Query," and the "Enquiry Coupon" found elsewhere must be enclosed. (2) The full name and address in addition to a *nom-de-plume* must be given. (3) Only one question on one subject is allowed in each letter. (4) Prints may be sent for criticism, but a separate coupon must be sent with each print, and a stamped addressed envelope (not loose stamps) for their return.

P.T. (Soho, W.).—The F values are f/16, f/20, and f/40.

METOL RASH (Burnley).—It is generally used undiluted.

C. MORGAN (Cardiff).—There are no disadvantages about the design.

S. (Haywards Heath).—Yes. The apparatus named is quite satisfactory.

VERAX (Abingdon).—We see your question was answered on page xli. last week.

B.F. (Briton Ferry).—A good reflex is the type generally employed for presswork.

W. D. G. DAY (Oxford).—Many thanks for your letter. We wish you further successes.

Q. (Stroud Green).—The apparatus is efficient, and, properly used, is quite free from the risks you mention.

X DORSET (Evershot).—Either would do very well, the R.R. the better of the two presumably, as it is a little the faster.

W. H. AXFORD (Godalming).—It is quite impossible at present. Your friends are labouring under a common misapprehension.

DISCUS (Nelson).—In our reply to you on page 437 of our issue for September 29th, 1-50th second should read 1-15th second in both places.

B. COLYER (Aldershot).—Application is made at the turnstiles, as we have pointed out repeatedly in *Photography and Focus*. Five minutes at f/8 should do what you require.

A. APPELYARD (Greenhithe).—The "Cycle Wizard A" camera was made by the Manhattan Optical Co., of New York, U.S.A. Its price in 5 x 4 size was ten dollars, in 7 x 5, 15 dollars.

KINGSTON CORRESPONDENT.—Will the reader who wrote us a letter about a month ago, which we published under the heading "Theft of a Camera," send us his address, as we have a letter for him?

J. W. BOWMAN (Dover).—The Leto plate-sunk method, should answer your purpose. A packet of the requisite materials and full instructions can be obtained for one shilling from the Leto Co., at 3, Rangoon Street, London, E.C.

H. PRESTON (Bombay).—The print must be hardened in formalin 1 part, water 9 parts, and is then rinsed and dried. It and the glass are immersed in a warm, four per cent. solution of gelatine, squeegeed and allowed to dry.

HISTORY (Northampton).—We gave a couple of shillings at a second-hand book shop for our copy of Tissandier's "History and Handbook of Photography." It ran through several editions (in English), and is fairly common.

A. MORTIMER (Archway Road).—The lens is very suitable for both, and if it is in good condition ought to give as good results as the R.R. We can hardly tell you "how to use it to the best advantage"; the question is too vague.

A.M. (Mill Hill Park).—We are sorry we cannot give you a satisfactory reply, but we can only answer specific questions in this column. Messrs. Burroughs-Wellcome will give you full particulars as to the use of any of their preparations.

ST. CRISPIN (Belvedere).—We cannot describe the ferrotype process in this column, it would take too much space. Fallowfield 146, Charing Cross Road, London, W.C., has a sixpenny book on the subject, and supplies all the necessary materials.

T.S. (Wrexham).—We have been using the "Standa" for plates for some months now, and like it very much. If you want to use your home-made apparatus it would be best to use a wooden rack well coated with asphaltum varnish. The stains are due to the hypo attacking the metal.

S. ADAMS (Finsbury Park).—Many thanks for the extract, for sending which we are much obliged. The experiments are well known, and it is supposed that the colours were due to the same cause as the colours in a Lippmann photograph. Unfortunately, the process never got any further.

C. (Silsden).—The blistering of the "non-curl" coating is not at all common, and we cannot suggest a cause. It may be that that particular spool was different in some way from the others; but more we cannot say. We have not seen more than a couple of examples of similar cases all told. Your manipulation does not seem to be at fault.

H.L.L. (Carmarthen).—A lantern is hardly a necessity at all. The negatives may be fixed up in a wooden or cardboard frame, and a piece of white card placed behind them at an angle of 45°, and illuminated either by daylight, lamp, or gaslight. Some workers use magnesium ribbon. The negative is then simply photographed on the lantern plate exposed in a camera in the usual way.

SPEEDS (Plumstead).—We gave a method in the same issue (page 417, September 22nd).

HARDUP (Birmingham).—The Aldis should suit you. We cannot explain the anomalies of price lists.

A. E. LARGE (Streatham).—Much obliged for the card. It was as you suggest. We are correcting it this week.

A.R.T. (Irthlingborough) asks for particulars of the "Ezee" vignetter, name of maker, and price. Perhaps some reader can give the desired information.

FOCUS (Manchester).—A Series V Protar would be most suitable. No. 3, listed at £4, being what would be wanted for the work. It would have to be stopped down to f/32 in most cases.

R. G. WILSON (Winchmore Hill).—There is certainly a considerable difference in the lenses, and it is all in favour of No. 1, as it should be at the price. Neither is at all liable to flare spot.

SOBER SIDES (Clapham Common).—Yes, it is possible, but not full size, as the camera does not extend far enough. If a vignetter is fitted to the lens for copying same size it can be done.

J.H.H. (Stalybridge).—We like the Ashford make as well as any, and certainly prefer wood to aluminium for the purpose. Many thanks for your kindly message of appreciation. We hope to continue to deserve it.

J. D. HIGGS (Maryborough).—At its price we do not know a better camera than the one you name. If you are prepared to spend a little more we should spend it in getting a better lens rather than some other pattern of camera.

R. O. SIBLEY (Enfield Town) asks "how to strike an ellipse with a reflecting surface so as to illuminate evenly a negative for enlarging purposes by artificial light." Perhaps some reader can provide the information required by our correspondent.

SPEED (Ferns).—You could give anything from 1 second to 1/16th second in the way you describe. It is better either to give shorter exposures, or else to stop down and give longer ones; as these intermediate times are not easily measured with a shutter such as yours.

A. ARNOLD (Mitcham).—The size named should be large enough; but its actual dimensions are determined by the design of the camera itself, and the distance of the mirror from the lens. Glass silvered on the front is what is wanted; probably an optician could get you a piece.

J. G. RICHARDSON (Clacton-on-Sea).—The negative may be immersed for an hour in an ordinary combined toning and fixing bath, such as is recommended for p.o.p. If this does not get rid of the stains they may be regarded as ineradicable. It will need a thorough washing after the treatment.

J. V. GOODES (Ilford).—We do not criticise prints in the paper. We publish at the top of this page every week the conditions under which we are willing to criticise prints, and deal promptly with all those which come to hand complying with those very simple conditions. We make no charge.

DISTORTION.—The print sent, which is said to be suffering from "distortion," is really suffering from bad definition. If it is impossible to focus the picture sharper we should send the whole outfit to the makers, asking them at the same time to explain the circular dark patch, if this manifests itself often.

FRX (Manchester).—They can be printed with a mask so as to leave a white border all round; or by using bromide postcards and an enlarger the quarter-plate negatives can be enlarged to cover the whole card. In the former case a postcard size printing frame, masks, and a piece of clear glass will be required.

C. E. BROOKS (Barnsbury).—The following formula for green tones was given by Prof. Namias. The slide is bleached in a five per cent. solution of potassium ferricyanide, rendered faintly alkaline with ammonia. It is then washed and immersed in

Ferric chloride	...	...	...	...	...	12 grains
Vanadium chloride	...	...	...	...	...	10 grains
Ammonium chloride	...	...	...	...	...	25 grains
Hydrochloric acid	...	...	...	...	...	25 minims
Water	...	...	...	...	...	5 ounces

The vanadium is dissolved in a little hot water to which the acid has been added and the rest of the ingredients are added in order, finally making up the bulk with water. The best green tones on slides that we have seen were got with the carbon process. There is no book on the subject.

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LETO

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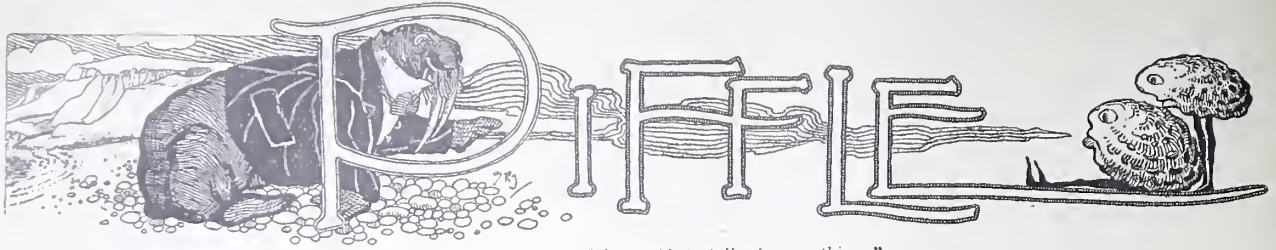
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THE

LETO

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"The time has come, the Walrus said, to talk of many things."

IT is the easiest thing imaginable in this shallow world to gain a reputation for originality. I could do it myself if I were not too modest and retiring. All you have to do is to ascertain what is usually said and done and then to say or do something different. "It's never too late to mend," quoth the vulgar herd. "It's never too early to mend," say I, and am promptly hailed (I hope) as a smart and original person.

* * *

We are more concerned with matters photographic. Well, then, just think the matter quietly over for a moment, and I think you will find that a good many of those photographers who are hailed as original, daring, epoch-making, soaring leaders, have done nothing more than fly blindly in the face of convention and common custom. Thus, the ordinary photographer (poor worm), trims his print with a sharp knife, and at least intends, if he does not achieve, rectangularity. One day a man trims a print roughly to some unnamable shape, and exhibits it in its ragged wretchedness, and we all fall down and slobber over his boots. He is original; he has such charming and ultra-artistic ideas, don't you know. Or suppose the fashion for wide frames is in full blast—frames of abnormal width, stained very dark, and put close up round a huge picture. Along comes our genius again, with a tiny print lost in a wilderness of mount, surrounded by an unstained frame the thickness of a matchstick. What a massive mind he must have! Who but him would have such rare and exquisite taste?

* * *

If I took a view at the seaside and found afterwards that right across the plate stretched a huge out-of-focus rope that I had carelessly overlooked, I should place the negative on the floor and dance a polka-mazurka on it to the jangled accompaniment of incandescent swear words. Although such a course is highly reprehensible and quite inexcusable, I feel sure, Mr. Reader, that you would do the same; while even you, dear madam, would probably be betrayed into saying "Tut, tut!" The original genius would do nothing of the sort. He would make a huge print in gum or oil, call it "The Cable," and if he were on the Selection Committee his rope would be hung on the line and produce a crop of puff paragraphs in the servile and inspired press.

* * *

Should you imagine I am exaggerating let me inform you that there is a print now being exhibited at the Salon, called "The Wheel." It is not an entire wheel, or even half a one, but it would be ridiculous to title it, say, five-sixteenths of a wheel. It is part of the wheel of a bathing machine, and between two of the spokes is a view of two bathers, bobbing up and down like that. Don't you call that original? The majority of us have never seen such a view, let alone photographed it. But we may see it some day. If you, dear reader, happened to be occupying a bathing machine, and just at the psychological moment of the interval between an aquatic and a terrestrial costume the bottom of the machine fell out and flopped you through, you would get the identical view shown. Whether you would wait to photograph it or not is a question you must decide for yourself.

* * *

When the ordinary jog-trot photographer finds a hideous object obtruding itself into the foreground of his picture he uses all his efforts to dodge it, and if he cannot he abandons his view altogether. That shows he is no genius. Otherwise, he would make the hideous obstruction his picture and let all the rest go. He could save himself and acquire fame and praise by calling his result "The Lamp-post," or "The Horse's Nose," or whatever it happened to bear some faint resemblance to. And, by the way, no genius would differentiate between a post and a nose.

The straightforward pretty-pretty photograph is rapidly becoming a thing of the past; not so much from choice as under pressure of circumstances. I can remember the time when a street scene in a large town would show a certain amount of sky. Later on there would occasionally be visible a thin telegraph wire. Nowadays there is no sky at all; it is obscured by a network of telephone wires as thick as elephants' legs. The genius doesn't care. He makes a print of the wires and leaves out the street. Do we quite realise that in the near future there will be no such thing possible to the photographer as a fine cloud effect or a sunset sky? The air will be thick with dirigible balloons, and aeroplanes, and bodies hurtling headlong earthwards. At first we shall patiently retouch them, or convert them into birds; but after a time they will be so numerous that if we take them out there will be no sky left. It is too much to hope that the illustrated paper will be extinct by that time, so no doubt amongst familiar everyday illustrations will be such subjects as a shower of corpses into the Serpentine from a burst dirigible airship two miles up, or the half-day Paris-Chicago return aeroplane demolishing in its flight the last remnants of the ruins of St. Paul's.

* * *

We smile now at a snapshot showing the awkward attitudes of men walking. In those days men will never be seen walking. I imagine a period when every man will be his own motor; he will slip on a pair of motor slippers and glide along wheresoever he pleases. But all his gliding will be underground. Man will have become a subterranean animal. He will only venture out through the trapdoors into the upper air when he is going to fly, either on his own account, or in one of the huge mechanical monsters that will whizz through space. No more of our atmospheric effects then.

* * *

I can fancy in those ghastly days some quiet underground gallery where is gathered a collection of photographs such as are derided nowadays as commonplace. None of your bathing machine wheels, or factory chimneys, or bisected nudes in coal-cellars, or other fearsome freaks, but our dear old familiar friends—the load that was the last; the still evening that came on; the bracken that was adjacent to the birch; the tide that was low; the light that was twi. And I guess that the mournful creatures who crowd that gallery would give their wings and their motor slippers for a chance to roam with a hand camera over the sunny land under an open sky. And I guess, too, that they will pay very long prices indeed for such of our everyday prints as may have survived, and especially such as record a glimpse of plain straightforward Nature. Even some of my prints may be appreciated then, for I am a very commonplace photographer myself, and am old-fashioned enough to prefer sunshine to factory smoke. But long prices for my prints in A.D. 2001 won't benefit me, and I would much rather take a lower price now.

THE WALRUS

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PHOTOGRAPHY. OCTOBER 20TH 1908

PHOTOGRAPHY

A JOURNAL FOR EVERY CAMERA USER.

EDITED BY R. CHILD BAYLEY.

PUBLISHED WEEKLY.

OCTOBER 20TH, 1908. TUESDAY. No. 1,041. Vol. XXVI.



THE CLUMP OF TREES.

BY SYDNEY H. CARR.

Awarded a Bronze Medal in the Advanced Workers' Competition (August),



EDITORIAL

Photographs by Her Majesty the Queen.

No opportunity of doing a kindly or charitable act is lost by the Queen, and the announcement that a book of photographs by her is to be published, the proceeds being applied "for charity," is therefore not in the least surprising. The book is to cost half a crown, and is to be ready "in a few weeks' time." In the meanwhile, orders for it may be placed with any bookseller or newsagent. As is well known, the Queen's camera is her constant companion, and photography has no more enthusiastic devotee than Her Majesty. We have no doubt that there will be many thousands of our readers who will welcome the opportunity which this affords them of securing a set of reproductions of photographs by the highest amateur photographer in the world, thoroughly informal snapshots of persons and scenes in themselves of the greatest interest to every Briton. A brief description of each picture has been written by the Queen, pointing out who is shown in it, and in some instances stating where the photograph was taken. "Queen Alexandra's Christmas Gift Book," as it is to be called, will consist of about 130 pages of demy quarto size, and the reproductions, which are of various sizes, will be mounted in most instances upon stiff green sheets. We learn that a sale of half a million copies is expected.

Home Interiors.

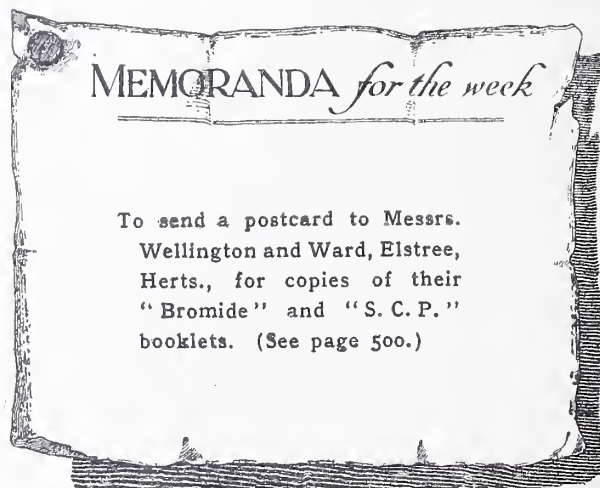
In the article by Mr. Osgood, which we print on page 495 this week, our contributor deals with the photography of interiors without the help of any special apparatus. In doing this he falls in with a policy we have always endeavoured to carry out on *Photography and Focus*. In describing how any new work may be undertaken we give the very minimum of apparatus that may be required. If we had a hand camera of fixed focus type with a single lens and a stand camera with all possible adjustments and fittings and the most perfect of anastigmats, we should choose the latter, of course, for interior work, and we should expect it to show a superiority over the former in the quality of the results obtained, while it would be immeasurably more handy and convenient in use. But the fact that the photographer has only got the simpler form of hand camera is no reason why he should not attempt interior work, and is no reason why he should not get very admirable photographs with it. In fact, good photographic work of almost any character can be done with the simplest apparatus, not so conveniently perhaps, but done.

We are constantly receiving prints for criticism or in competitions which are accompanied by such a statement as this: "Do not criticise, too severely, it was only taken with a guinea camera." Such prints very rarely show any defect which may fairly be attributed to the camera, although they generally have plenty which are due to the photographer. These excuses show how difficult it is for the average amateur to realise how small a part in his success or failure is played by his apparatus, how large a part by himself, and the belief that special forms of work require special form of apparatus—portrait lenses for portraits, landscape cameras for work in the field, and so on—is another manifestation of the same idea.

Perhaps our contributor's article may help to turn the attention of some of our readers to a branch of photography which has not had as much attention as it might. We remember reading in an American magazine some years ago an expression of surprise that British photographers, despite the charm of the old world homes on their side of the Atlantic, seemed to have their attention completely monopolised by interiors of cathedrals and churches.

Cold Solutions.

At the moment of writing summer seems to be still at its height, but before this reaches the readers of *Photography and Focus* this may all be a thing of the past, and the outlook a wintry one. It will be well to remind those of our readers whose experience is limited, therefore, that if the water which they happen to be employing is many degrees colder than usual, all the photographic operations that are carried out with it will be prolonged. If they are developing they may fancy that the plate is much under-exposed, so sluggish will be the coming up of the image. It is not that, however, but the colder solution which is at fault. The same thing may happen in toning, and the bath may require twice as long as it did in summer to accomplish a given result. The experienced photographer recognises this fact, and either allows extra time to compensate for colder solutions or uses water which has been drawn for some little time so as to get its chill taken off. Of the two methods the latter is to be preferred, and if there is any reason to suppose that tap water is much colder than it has been of late, the precaution of drawing the water required for developing and toning an hour or two before it will be used should be observed.



A Seasonable Amusement.

It was said of the palace of a certain parvenu that its style of decoration was "either late Pullman or early North German Lloyd"; and the witticism was certainly not without its point. We all know the character to which that description was meant to apply, the elaborate machine-made "ornament" from which every trace of spontaneity had been carefully removed. The period has gone by, and machine made carving turned out by the thousand foot run has given place to the simpler and more directly personal output of the craftsman. The same change has shown itself in other directions, and in nothing more than in Christmas and New Year cards, menus, programmes, and the like, which are now often the work of the giver throughout. Now that the dark evenings are coming on, a seasonable amusement will be found to be the preparation of such forms of stationery for home use.

There are so many ways of doing such work that there is ample scope to suit all tastes. Designs may be made of flowers or leaves; holly and mistletoe lend themselves very well to such a purpose. A portrait can often be utilised, or a picture or group of pictures of the home. A very attractive programme can be made with no more photographic decoration than a neatly masked print in the top left-hand corner. The neatest way of doing this is by making the whole programme of gaslight or other paper and simply printing in one corner, the rest being masked. There are solutions on the market for sensitising ordinary paper; but although these will give very good prints when the photograph

covers the whole of the paper, they are not so satisfactory when a mask is used. A method frequently adopted is to put the lettering on a card on which a photograph is mounted, and to make a negative of the whole thing on a reduced scale, from which programmes or cards can be printed in one operation. This is certainly a very simple method, and is effective; but the reproduction is never so good as when the print can be made direct from the original negative.

The Reverend James H. Tupman is as mild as he is meek,
The slightest signs of wickedness bring blushes to his cheek;
But from his lips you'll sometimes hear the strong expletive "drat!"
When Tupman tries to photograph the cat.

O Pussy, it is sad to think that your unseemly games
Should cause such dreadful language on the part of
Pastor James;
Must you behave as though the shutter-bulb is like a rat,
When Tupman tries to photograph you, Cat?

* * * * *

Tupman, the kindest, gentlest soul that ever drew life's breath,
Welcomed, with callous unconcern, the news of Pussy's death;
For now she has been stuffed, and no one hears the whispered "Drat!"
When Tupman time-exposes on the cat.



Forthcoming Events

Societies will have their meetings announced here if the syllabus is sent to us at the beginning of the Session or from time to time.



MONDAY, OCTOBER 19TH.

Bradford P.S. "Some Mountains and Glaciers Switzerland." A. E. Hassé.
Stafford P.S. "Velox Paper." W. F. Slater.
Bradford G.S.P.S. "Sunny Memories." Rev. E. A. Miller.

TUESDAY, OCTOBER 20TH.

Nelson P.S. "Marine Photography." F. J. Mortimer.
St. Helens C.C. "Carbon." J. Hesford.
Nelson C.C. "Selection of a Printing Process." H. Stansfield.
Sheffield P.S. "Winter in the Alps." Tulloch Cheyne.
Hackney P.S. "Abbeys and Churches of South Essex." C. Forbes.
Birmingham P.S. "Annual General Meeting."
Leeds P.S. "Lumière Autochrome Plate." Thomas K. Grant.
Chelmsford P.S. "Contact Prints and Enlargements." A. C. Baldwin.
Halifax C.C. "A Scamper through Canada and the States." Lot Whitworth.
Manchester A.P.S. "Some Points in Picture Making." G. E. Mellor.
Erdington P.S. "Photo. Micrography." J. L. Monk.
Wimbleton & D.C.C. "Carbon." D. H. Magnus.

WEDNESDAY, OCTOBER 21ST.

Rochdale P.S. "Cheetham Hospital." J. J. Phelps.
Wimbleton Park P.S. "The Selection of a Printing Process." N. Cheeseman.
Ilford P.S. "Five Centuries of Church Building." H. W. Bennett.
Everton C.C. "A Tour in North Wales." W. T. Wright.
Huddersfield Naturalist & P.S. "Members' Evening."
G.E.R. Mech. Inst. "1907 Affiliation Slides."
Crowdon C.C. "A Ramble Round London." H. Creighton Reckett.
Leeds C.C. "Making and Toning Lantern Slides." Rev. Henry W. Dick.
North Middlesbrough P.S. "A Few Hints on Copying." S. H. Bentley.

THURSDAY, OCTOBER 22ND.

Hull P.S. "Photo. Micrography." J. Hollingworth.
Liverpool A.P.A. "Platinotype Printing." C. F. Inston.
Blackburn & D.C.C. "Swiss Scenery." Dr. C. Thurston Holland.
L. & P.P.A. "Photo. Mechanical Grain." A. J. Bull.
North-West London P.S. "Gower." J. S. Fairclough.
Richmond C.C. "The Humble Beauties of the Flower World." E. Seymour.
Small Heath P.S. "Oil Printing." F. G. Rockett.
Handsworth P.S. "Photographic Christmas Cards." E. G. Collins.

FRIDAY, OCTOBER 23RD.

Birkenhead P.A. "How I Make a Lantern Slide." Members.
Nelson C.C. "The Oil Process." J. E. Nuttall.
Ashton-under-Lyne P.S. "Whist Drive."
Colne C.C. "Flashlight Photography." F. Atkinson.

SATURDAY, OCTOBER 24TH.

Bolton A.P.S. "The Abbeys of Scotland." Dr. E. Dalwin Wilmot.
Glasgow Southern P.S. "Glasgow Harbour."
Sheffield Friends' Schools P.S. "London."

MONDAY, OCTOBER 26TH.

Bedford C.C. "Trade Demonstration. The Lens."
Oxford C.C. "Lantern Slide Making." Mr. Robinson.
Bradford P.S. "Some Photographic Attempts to get out of the Beaten Track." A. Houghton.
Egges Park & D.P.S. "Beginners' Class Technical Demonstration."

HOW I MAKE MY CAMERA PAY

By L.S. Brown
Special to Photography & Focus

ONE OF A SERIES OF
ARTICLES SHOWING HOW
EVERY AMATEUR MAY
RECOUP AT LEAST SOME
OF HIS OUTLAY.

IN a previous article I

advised the would-be press photographer to keep his ears open as much as his eyes. One hears about subjects for press photographs more

often than one finds them by looking

for them. Indeed, you may notice a subject and nevertheless pass it by, because its "story" is unknown to you, and therefore you fail to perceive its value. For example, an old church might strike you as a dull subject, but if you knew that somebody had committed a murder in the church it would at once present itself as of press value. Thus, as you walk or cycle along the high road, you may be passing "press subjects" every five minutes without being aware of the fact. Pause to chat with some local informant, and you may learn what you are missing.

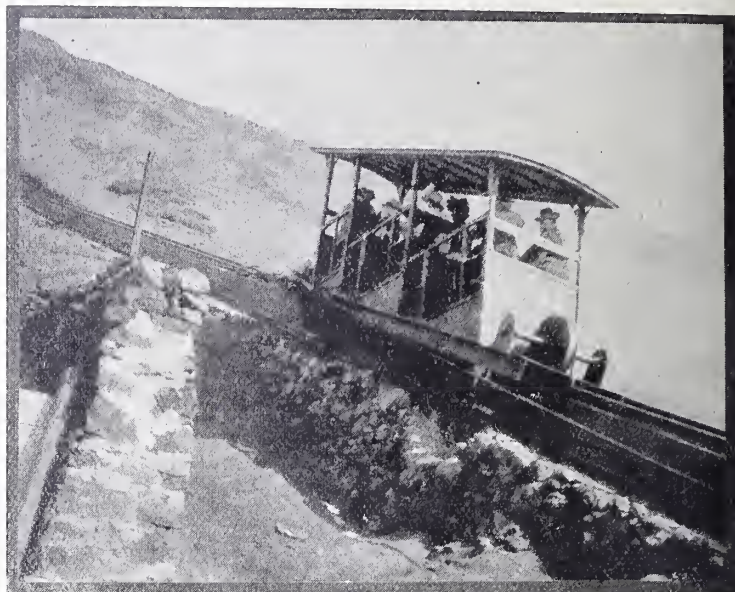
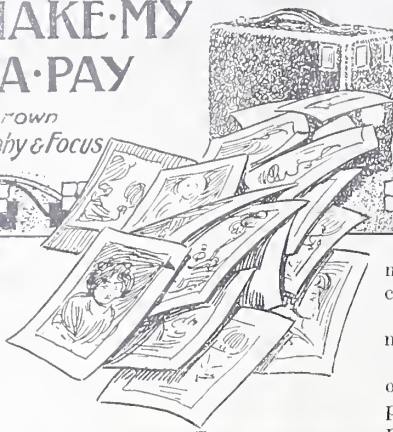
Life is too short, however, to consist of perpetual interrogations of rustics and others who may conceivably have some useful item of knowledge to impart, but more likely have none. To seek press subjects haphazard rarely pays, truth to tell. Chance plays an important part in the unearthing of press subjects—let that be granted; but to rely wholly on chance is nonsense. How, then, are press subjects ordinarily discovered?

Firstly, as I have said, one hears allusions in casual conversation which put one on the track of press subjects. (*E.g.*, a lady once mentioned to me that a friend of hers had invented a new kind of hygienic dress. I sought an introduction to her friend, photographed the dress, and sold the picture to a ladies' paper. And the snail "scoop"

mentioned in my last article is an equally good case in point.)

Secondly, one must diligently follow the newspapers.

I cannot lay too great a stress on this. No one who is not a student of current news can possibly hope to be even a dabbler in press photography. I do not say that the press



The Funiculaire Car on Vesuvius.



Aylesford Bridge.

photographer should set out to photograph what are called "news items," unless he is a professional. These notes are for amateurs; therefore I warn the reader that the newspaper will tell him as much what *not* to take as what to take. The very important occurrences are not for him; they are for the professional. The Olympic Games, the King opening Parliament—these are too big for the amateur—they involve too much trouble and necessitate too "advanced" work to be worth his tacking; at any rate, at the beginning of his career. Dozens of professionals will be concentrated on these subjects, and the competition is so keen that the amateur will rarely see his plate-money back. But hidden away in odd corners of the newspapers are little paragraphs which, just because they deal with things too small for the professional, mean money in the pocket of the sharp amateur.

Some time ago I saw a paragraph in the papers stating that the old bridge at Aylesford, in Kent, was to be replaced by a modern one. I bicycled down to Aylesford and photographed the said bridge; and incidentally perceiving that Aylesford itself was picturesque, I exposed two or three plates on nice views of it also. Result: not only

did the editor of a weekly buy and reproduce the picture of the bridge itself ("A Vanishing Landmark" or some such title was used), but being pleased with the other pictures he had an article written round them, and reproduced three of them in all. Which is to say, my pleasant bicycle excursion earned thirty-one and six for me right off the reel. Further, an American paper, seeing the photographs, wrote to me through the editor asking for two of them, for which I got another pound.

Now there must be hundreds of photographs of the bridge as good as mine, but apparently the other photographers did not read the papers; so I, who knew nothing whatever

when again I hope I may sell copies of my print. But if I don't read the papers, how am I to know when the next eruption occurs?

Country dwellers should always follow closely their local papers, which often contain odd items of information not recorded in the London dailies, but which would nevertheless be of London interest if only the London editors had a photograph of them. Curious phenomena, for example, may profitably be looked out for; such things as a plague of caterpillars, the birth of a three-legged calf, the collapse of a row of cottages, queer experiments in farming, odd competitions (e.g., I read of a farmer who bet another farmer that



THE FOUNTAIN, KENSINGTON GARDENS.

BY A. H. BLAKE, M.A.

The original of this picture is No. 94 at the Exhibition of the Royal Photographic Society.

about the history of the bridge, and am ignorant of archæology, raked in the cash, while the negatives made by my possible rivals slumbered unused in their boxes. *Verb. sap.* Read the papers, particularly their minor sections.

Sometimes one already has in stock a photograph which, thanks to news in the papers, suddenly becomes of topical value. When on a tour in Italy once, I took a snap shot of the funiculaire car which climbs Vesuvius. Not long ago the papers announced a serious eruption of the volcano, mentioning casually that the funiculaire was damaged. At once I looked out my negative of the car, printed it, and sent it to various papers. It reached them before any photograph of the actual eruption itself. The "Daily News" and the "Morning Leader" both used the photograph, and so did another paper whose name I have forgotten. Result, Thirty-one and six. Naturally, I await another eruption,

he would sit down to dinner in the evening in a coat which was a growing fleece in the morning), discoveries of antiquities, examples of coast erosion—the list is endless, and one can only hint at some of its possibilities. Distinguish, however, between what is of local interest and what is of sufficient interest to appear in a non-local magazine. The arrival of a new vicar at your village may be an episode of supreme local importance, but a photograph of the reverend gentleman may not appeal in the least to the editor of the "Daily Mirror" of London. On the other hand, if you have a local paper which uses photographs, by all means supply its editor with pictures of local interest, even should he pay lower rates than the Londoners. The local news market is by no means to be sneered at—least of all if you live in a big city like Liverpool, Manchester, Newcastle, and so on, whose journals use photographs daily.



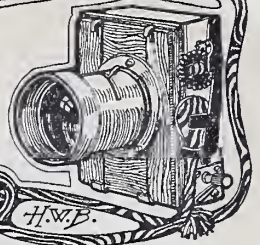
THE OLD GARDEN GATE.

The original of this picture is No. 33 at the Exhibition of the Royal Photographic Society

BY AUBREY HARRIS.

The Focal-plane Photographer, a Sportsman.

BY ADOLPHE ABRAHAM, B.A.



THE analysis of movement is, of course, most easily and completely performed by a cinematographic representation, but such apparatus is not often obtainable, and an exponent of focal plane photography is occasionally called upon to secure a photograph exhibiting some particular feature in a complicated movement.

It is, of course, a platitude to assert that such an achievement involves an extraordinarily high degree of accuracy, which is not called for in the average high speed photograph. In the latter, approximately correct timing yields a result which sufficiently resembles the desired effect, and an error of a small fraction of a second is regarded as of little consequence.

Contrast with this the attempt to photograph an incident which is, to use a convenient if unscientific term, momentary, and in which an error of perhaps $\frac{1}{1000}$ th of a second spells complete failure. I will give as extreme examples the attempts to depict the impact of racquet and ball in the service at lawn tennis, the shot just leaving the hand of a weight putter or the position of the hammer thrower in the circle when the hammer starts on its flight. As a much more useful, and fortunately more easily secured, example, I may cite some particular feature of a stroke in rowing for which I have often been requested, as a photograph brings home to an oarsman a far better idea of his fault than any number of hours of coaching.

Constant practice will institute a sympathy between camera and operator, and makes for an accuracy which is almost uncanny. I know no better training than photographing express trains, aiming at exposing when the train passes

some marked spot and checking one's accuracy by the resulting negative. High-speed photography is very much like shooting, and I understand from sportsmen that the same problem occurs in their sport as in mine, viz., the factor of anticipation, involving a period of time which compensates for the reaction period of the operator, which means the interval between seeing an object and acting upon the stimulus; in my case, pressing a release, in the sportsman's case pulling a trigger.

And in just the same way one's success varies on different occasions in bagging a photograph as in bagging a bird, or, to apply a simile from another sport, in "timing" a photograph as in "timing" a stroke at cricket. There are days when one becomes "set"—possibly physical fitness has something to do with this—so that it seems impossible to fail; at other times the factor of anticipation is exaggerated or decreased, and the photograph is badly "timed."

The cardinal rule for accurate work is to expose when the

moving object reaches the desired spot, and not, as would at first sight appear necessary, beforehand. It is an essential requisite to watch the progress of the object directly, avoiding for the actual exposure the use of the finder. A great deal of work has been done in the past in estimating the reaction period of different individuals in varying circumstances. More recently, research has been extended to prominent cricketers and others whose nervous systems have been specially trained to respond



The exact instant of service when racquet meets ball.

to stimuli with the minimum of delay. And I venture to think that experiments among focal plane photographers would bring to light some points of very great interest to students of psycho-physiology.

Two Tones on the same Postcard. Gaslight or Bromide.

By H. J. S. ANDERTON. Special to "Photography and Focus."

THE method which is described in the following notes is one by which two quite different tones can be obtained on gaslight or bromide prints. It is a simple one, and is most effective in the case of postcards of views or portraits to which a border has been added from another negative.

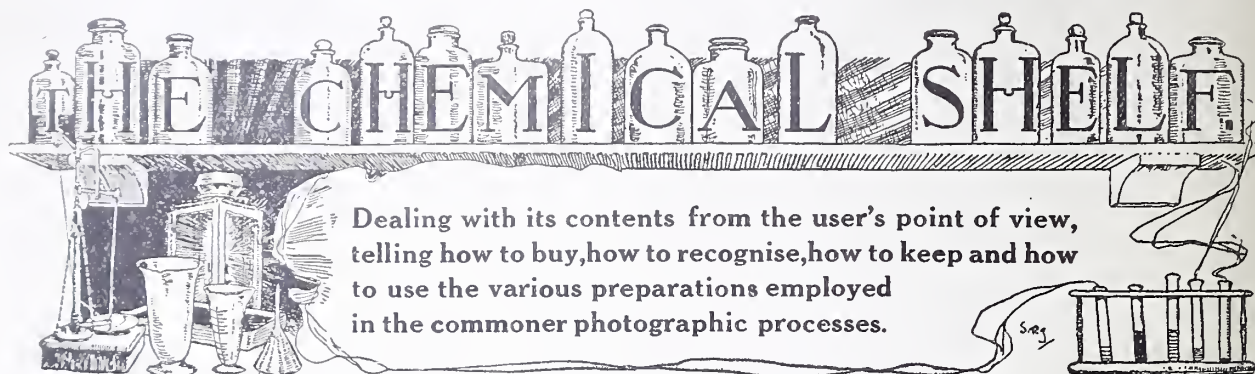
The first operation is the production of the postcard, which is carried out in the usual way, the card being properly fixed

and washed, and then allowed to get thoroughly dry. While the card is drying the necessary materials for the after operation may be got together. These consist of the toning bath, which may be of any of the recognised formulæ, copper, uranium, iron, etc., a small pot of vaseline, and the mask through which the "picture" portion of the card was printed. The card is laid face upwards upon a clean surface, and the mask is adjusted so that the view or portrait appears

through the opening. The finger is then dipped in the vaseline, and this is lightly smeared over the picture, care being taken not to shift the mask. When the smearing process is complete the card is lifted by the edges and is placed in the toning bath, which will, of course, be repelled by the vaseline and will operate only on the border portion of the post-card, leaving the picture portion in its original condition. As soon as the toning operation is finished, the necessary washing is carried out in the usual way, and the card is once more dried. It only remains to remove the vaseline. Most can be wiped off with a soft duster, but if this is not sufficient

for the purpose the print can be finished off by placing over it a piece of clean blotting paper and pressing it down with a hot iron. This will be found to absorb the last traces of the vaseline.

If it is the view that is to be toned, the border being left untoned, it is of course the blank which was left when the mask was cut that must be placed over the card, the vaseline being then smeared over the border. The great thing is to be careful that the whole area to be protected receives its coating of vaseline, and that none gets on the part that is to be toned, or patchy results will be inevitable.



ORTOL.

Ortol is one of the newer developers, which when first introduced seemed likely to attain great popularity; but comparatively little has been heard of it lately. It is a white crystalline powder, very soluble in water, and as it is only made for photographic purposes it is not likely to be met with in an impure condition, so long as it is bought in the makers' unopened bottles.

Ortol as a developer may be regarded as most like metol-hydrokinone in its general behaviour, and, in fact, it contains hydrokinone. It is very rapid in its action, and keeps very well in solution. Ortol should be dissolved with metabisulphite as a preservative, and not with sodium sulphite, as with the latter it is said sometimes to stain the negative, although many workers have not found this to be the case.

FORMULÆ.

Ortol-Soda Developer for Plates.

Ortol	...	...	...	80	grains
Potassium metabisulphite	...	...	...	20	"
Water	...	...	...	10	ounces

B.

Sodium carbonate (crystals)	...	...	...	1½	ounces
Sodium sulphite (crystals)	...	...	...	1½	"
Water	...	...	...	10	"

For use, equal parts of A, B, and water are taken. The quantity of water may be increased to three times this, if a slower working developer is preferred.

Ortol-Potash Developer for Plates.

A.

The same as above.

B.

Potassium carbonate	...	...	...	½	ounce
Sodium sulphite	...	...	...	1½	ounces
Water	...	...	...	10	"

For use, equal parts of A, B, and water are taken.

PARA-AMIDO-PHENOL.

The developing substance bearing this name is either paranol, which is the base, or else is a white crystalline compound, more correctly described as para-amido-phenol hydrochlorate. It is almost unknown to photographers in that form, but when made up into solution with a sulphite and caustic alkali, it is one of the most widely used of photographic developers, being known as rodinal, which will be dealt with under that heading in a subsequent issue.

The drawback to the use of para-amido-phenol hydrochlorate is that, when it is used in the ordinary way to make up a developer, the addition of alkali, which is necessary,

results in the formation of a salt which has a restraining action, which is not required. The ready-made solutions, paranol (q.v.) and rodinal, are free from this.

FORMULA.

Water	...	...	...	35	ounces
Para-amido-phenol hydrochlorate	...	...	...	75	grains
Anhydrous sodium sulphite	...	...	...	275	"
Potassium carbonate	...	...	...	275	"

This is the Lumière formula.

PARANOL.

Paranol is the name given by Messrs. Lumière to the para-amidol-phenol base which they prepare. It takes the form of a white crystalline powder, and being made specially for photographic purposes, there is no fear of it being unsuitable, provided it is obtained in the makers' packets.

As a developer it is rapid, clean working, and very powerful in its action. It does not readily discolour, does not stain the film or the fingers, and when made up into a single solution concentrated developer it keeps excellently. The formula given below is that issued by Messrs. Lumière.

FORMULA.

Water	...	...	...	34	ounces
Anhydrous sodium sulphite	...	...	...	6½	"
Caustic lithia	...	...	...	142	grains
Paranol	...	...	...	358	"

The sulphite is first dissolved in the water, then the lithia, and finally the paranol. If ordinary water is used, light flakes are liable to form in the solution, but these may be disregarded.

PICRIC ACID.

Picric acid used to be easily obtainable in the form of small yellow crystals, soluble in water and still more soluble in alcohol. Then it was discovered that under certain circumstances it was a powerful explosive—lyddite is simply fused picric acid—and although those circumstances were hardly likely to be realised unintentionally, it became almost if not quite impossible to buy picric acid. The hardship was not very great, as its uses were limited to the manufacture of yellow screens for use with orthochromatic plates. Ammonium picrate, dissolved in water, can be purchased from the manufacturing chemists, and is a more efficient dye for the purpose than picric acid itself. The gelatinised glass is simply placed in a solution of the strength preferred until it is stained, is rinsed under the tap and dried. The yellow colour is a pale one, but the screens are very effective. It is not likely that the amateur photographer will want to give picric acid a place on his shelves, so further mention is unnecessary.



REPLIES TO CORRESPONDENTS.



Queries are dealt with in strict rotation in the order received. Only "Urgent Apparatus" queries will be dealt with by post, for which purpose a stamped envelope must be enclosed.

REGULATIONS.—(1) Envelopes must be marked "Query" and the "Enquiry Coupon" found elsewhere must be enclosed. (2) The full name and address in addition to a *nom-de-plume* must be given. (3) Only one question on one subject is allowed in each letter. (4) Prints may be sent for criticism, but a separate coupon must be sent with each print, and a stamped addressed envelope (not loose stamps) for their return.

T. SANDERSON (Husburn).—Jonathan Fallowfield, 146, Charing Cross Road, London, W.C., supplies it.

THOMAS MAWDSLEY (Preston).—We have asked our advertisement department to communicate with the company.

H. PRESTON (Bombay).—We have no knowledge of the firm you name, and have been unable to trace their address.

BRIXTONIAN (Brixton).—The 3A.F.P.K. with the best lens that can be got for the price you are prepared to pay would be just what you require.

TEE GEE REEVES (Durham).—The prints are simply dried after washing, and are then retweeted and squeegeed on to the ferrotype plate. No preparation is needed.

SHAFI (Wazirabad).—The holes if not very numerous might be covered with thin black court plaster, but if more than two or three in number a new blind will be a necessity.

J. COPE (Sunderland).—The card is on glossy bromide, and has clearly been dried on a ferrotype plate or pulp board in the usual way. There is no machine for doing it.

SPECS (Brook Green).—S. Guiterman and Co., Ltd., 35, Aldermanbury, London, E.C., are the wholesale agents for it, and would no doubt tell you where you could get it in small quantities, if that is all you require.

H. H. COPE (Highbury).—You do not say what it is you want to know. We will do our best to answer any specific question; but can hardly give a general description of how to carry out a process with the broad lines of which you seem to be quite familiar.

E. F. MEE (London, S.E.).—We should not like to meddle with it, if the negative is a valuable one, and would prefer to spot out the mark it makes on the prints, which could hardly be much trouble. There would be great risk of injuring the negative if any attempt were made to remove it.

FLIP (Clapham Park).—You are not likely to have much trouble with "Photopake." We have found an ordinary lantern plate, blackened by immersion in a sulphide toning solution, better than any varnished glass for the purpose. Houghtons sell special opaque lantern plates for this work.

CHUM (Huntingdon).—You can fix on a negative lens instead of a positive one to increase the focal length, following exactly the course described in our issue of the 6th ult. You will have to stop down a little. An eyeglass, such as is used by short-sighted persons, it what is wanted, and can be got for a few pence.

H. W. DUNN (Winchmore Hill).—We should not think the plates too slow; and if you are giving time exposures we should prefer them to faster plates for the work you name. We can give you no information as to exposure, except that the only way to avoid waste of plates, and failure, is to get and use a reliable exposure meter.

SAP (Tralee).—The best advice we can give you is to get "The Hand Camera," by Wastell and Bayley, price 1s. nett, or post free from our publishers for 1s. 2d., and follow the procedure given therein. When in doubt on any point write us sending a print or negative, and enclosing the coupon from the current issue of the paper, and we will help you.

ARTH (Blaenau Festiniog) writes that he "is anxious to win a medal or similar prize in competition," and asks us the best way to do so. We can only suggest as the quickest way that he sends the best work of which he is capable into such competitions as appear to have a low standard, or to offer the greatest number of awards. It ought to be easy enough.

J. G. PARIS (Ashford).—The process was described in *Photography* for January 31st, 1903, page 104, which is out of print, but may be consulted at the R.P.S. library. If for "sensitised paper" you read "bromide paper" or "a dry plate," you will find it possible to get a copy of sorts, by working in the way suggested. There are no fuller details, and the process is of theoretical interest only at present.

ENGINEER (Stapleford).—The prints are lightly rubbed over with a solution of ten grains of Castile soap in an ounce of methylated spirit, and as soon as surface dry are passed through the machine. The proper heat for gelatino-chloride P.O.P. prints is ascertained by touching the bar with a moist finger. It should dry at once, but should not hiss.

PUZZLED (St. Helens).—Special type is sold for the purpose by Messrs. W. Butcher and Sons, of Camera House, Farringdon Avenue, London, E.C., and others. Or the titles can be neatly lettered on in indian ink with a fine brush. When the title appears on the white margin, it is printed at the same time as the card, by filling up an aperture in the mask with a collodion film negative of the lettering.

CONSTANT READER (Hebburn).—Your own selection seems excellent. We could not improve upon it.

DUFFER AND HURFIELD (New Plymouth, N.Z.).—We have sent your letter on to "The Walrus." Your method ought to suit his negatives very well.

W. B. SPRY (Chudleigh).—We should start, at any rate, with a negative spectacle lens of, say, 6in. focus. As they are quite cheap, you could get others if you wished later on without the outlay of more than a shilling or two.

X. DORSET (Evershot).—The size would have to be governed by that of the enlarging apparatus at your command. Probably it would be best to make the original negative of the smallest size you require, and to enlarge all the rest.

A. SHULSEN (Derby).—They must be soaked in cold water for an hour or two, and may then be peeled off the mounts if mounted with starch or paste. The process is a risky one, at the best, and requires the greatest care to avoid injuring the prints.

STACKSTEADS (Manchester).—You might try a two per cent. solution of oxalic acid followed by washing; but it is very doubtful if it will be effective. If not, there is nothing for it but to spot out the defects on each print with a brush and pigment.

GASLIGHT (Manchester).—We cannot give a formula for making glossy or matt gaslight paper; nor do we know of any book that gives the necessary information. Most gaslight papers are coated with a slow bromide emulsion, but the details are trade secrets.

REV. A. C. STRATTON (Hampstead).—Glad to learn that our advice as to tank development has proved satisfactory. Are you not mistaking a difference of colour or material for shadow? It seems to us that the sun is somewhere to the right and shining full on the end of both chimneys.

P. JENNINGS (Brighton).—We had no knowledge of the matter referred to in your letter, our paragraph having no reference whatever to you. Our advertisement department informs us that a number were unfortunately crowded out last week. We have passed your letter on to it for attention.

HOREHAM (Heathfield).—Develop them precisely as you develop your own plates, with pyro soda, you could not do better. Do not use any bromide, and watch development in the later stages, taking particular care not to over-develop them if they seem under-exposed or under-develop them if they are over-exposed.

J. T. FIELDING (Darwen).—We are glad to have your views, but you overlook the fact that while we try to please all our readers, we have to cater for varied tastes. If all the rest pleases you, as you so kindly say it does, we have done more than we might have hoped, though not more than we have tried to do.

CARBON (Malvern).—The tissue has probably become insoluble, as you say it leaves the paper just as when it was squeegeed on. It would be best to soak a little scrap of unexposed tissue in cold water for a minute and then put it in warm. The whole of the coating will dissolve away, if the tissue is in good condition. If it does not, the tissue is spoiled. Over printing may cause it. Leaving the tissue too long in cold water before squeegeeing will also cause it. It should be squeegeed as soon as it begins to unroll.

R. H. D. LEE (Bungay).—The best way of developing stale platinum paper is by the addition of sodium phosphate to the potassium oxalate developer. One part of phosphate to four of oxalate is usually sufficient, but the quantity may be increased if desired. The developer is used at the ordinary strength. A trace of potassium bichromate added to the oxalate developer is said to help to keep the prints clear, but this may easily be overdone, and produce hardness. We should work on these lines on a print cut up into strips to see what strength and composition of developer is best suited; but if the paper has gone very far, nothing will be of much use.

GULL (Banbury).—The size of the gulls has nothing whatever to do with the make of the lens but solely with its focal length—which you do not state. From the same standpoint, you will get the gulls twice as high, if you use a lens of twice the focus. There is nothing in your print to show that the lens is not a good one. If you want a larger image you must buy a longer focus lens, which may be of the same make or another. The telephoto lens will mean that you are working actually at a small stop, and so necessitate an increased exposure. Of course, any lens which gave the gulls larger, on the same size of plate, would then be working at a narrower angle. If it could work at a wider angle it would require a larger plate to do so.

B.P. (Bexhill).—We do not criticise prints in this column. See conditions above.

A. MACKINTOSH (Forfar).—We have asked our advertisement department to reply to you direct.

INQUIRER (Belfast).—It is perfectly satisfactory; but whether first-class work is done with it depends on "Inquirer."

PUSSY (Walthamstow).—We do not remember seeing the apparatus, but their other goods are perfectly satisfactory. You could not improve on your lens selection.

BARONY (Nantwich).—All three are satisfactory; we have most experience with No. 1 and like it. You will not do wrong with any of them if you buy the one which has your personal preference.

S.O.B. (Walthamstow).—Fix on the lens of the camera a magnifier or reading glass, and use a small stop. This will give a larger image—how much larger depends on the focus of the extra lens employed.

LWAY (New Barnet).—Sorry we cannot help you; but we are not familiar with the optics of telescopes. You would do well to consult a manufacturing optician, unless you have some friend of astronomical tastes.

K. M. ALLEY (Berwickshire).—The "N. and G. Reflex." We certainly should not say it is any more likely than the ordinary hand camera. "The Complete Photographer," by R. Child Bayley, price 10s. 6d. nett, answers your description.

G.A.S. (Cardiff).—You will probably find the amidol formula usually recommended for use with bromide paper the best developer for negatives that have been kept a considerable time between exposure and development, as it is extremely clean in working and free from any tendency to fog. But if the plates have been properly kept the keeping should not have affected them in any way. If the amidol is used, one must be careful not to under-develop.

PUSS (Bournemouth).—Yes. Most daylight enlargers will take a dry plate in place of the bromide paper. A positive must be made from the negative, preferably on a lantern or other slow plate, and then this positive being put where the negative is usually placed in the enlarger, and the plate where the bromide paper goes, an exposure is made in the ordinary way. It will be very much shorter than for bromide paper, as plates are generally much faster, and the positive is almost sure to be more transparent.

F.M. (Chirk).—There is no risk whatever if the apparatus is used with ordinary care.

BUCKLAND (Hampstead).—The terms are synonymous. We got ours at Ross, Ltd., Cockspur Street.

C. PRATT (Bradford).—The negatives are spoiled; nothing will remove the stains without removing the picture itself.

LANCASHIRE LAD (Southport).—You can use the bisulphite, two drams to the pint of solution will be about right. It will have the same effect precisely as the metabisulphite.

F. FOSTER (Kingsland).—You are quite right, and their address was Rochester, N.Y., U.S.A., but we do not know whether they are still in business or not. We have not heard of them for a long time.

C.A.S. (Upper Holloway) wishes to attend photographic classes, but has only Saturday evenings at liberty, and wants to know of any which are held then. Perhaps some reader can supply the information.

H. RAINE (Lambeth).—There is no very satisfactory way of glazing prints on matt paper except by enamelling. This process was described in our issue for August 18th on page 303. We are unable to reply to enquiries by post.

PETROS (Harrogate) writes: "I should be obliged if you could inform me whether the German postal authorities enforce any special regulation as regards sending exposed photographic films from Germany to England, presuming, of course, they are suitably packed." Perhaps some reader can supply the desired information.

A.G.B. (Luddenden Foot).—We would gladly help you if we could, but your questions can only be answered by someone on the spot. If you cannot find the best position for the camera, you may be sure we cannot with only a sketch to guide us. We can only say, get as far away as you can, and make a preliminary trial exposure, using, say, three or four yards of magnesium ribbon; and be guided by the result.

B. G. BISHOP (Upton Manor).—We should not expect the developer even at that degree of dilution to give so foggy a result that the negative was unprintable; but there can be no doubt whatever that excessive dilution of a developer tends to give fogged negatives if development is carried far enough to get printing density at all. We should advise you not to exceed the dilution recommended by Watkins and to omit the bromide.

The Beginners' Competition for September.

THE entries this month show no falling off either in quality or in quantity, the numbers manifesting a distinct increase on last month. The prints, as might have been expected, dealt mainly with holiday scenes and subjects, and the work as a whole calls for no general comment.

FIRST PRIZE.—A signed copy of "The Complete Photographer," "Above the City's Turmoil," which was

sent by Frank W. Gardner, 135, Vaughan Road, Harrow. SECOND PRIZE.—A free subscription to *Photography and Focus* for twelve months, "Reverie," by J. A. Grierson, Walton Hall, near Preston, Lancashire.

CERTIFICATES.—"The Lock-keeper's Cottage," by J. Arthur Hill, Verdala, King's Road, Berkhamstead; and "The North Aisle, Christchurch," by B. Timms, care of J. Harding, 105, Colmore Row, Birmingham.

A Society with a History. The Birmingham P.S.

THE inauguration of the new premises of the Birmingham Photographic Society in Exchange Buildings, New Street, was formally carried out on the 6th inst.

At an early period of its existence the society held its exhibitions on the same premises, but for the last seven years the members have assembled in Norwich Union Chambers. The new home of the society is more convenient in many ways.

The present society was founded in 1834, but Mr. Harold Baker, in a paper read some years ago, traced the development of the photographic art in Birmingham as far back as 1790, when experiments were made with sun pictures by Boulton and Watt at Soho. One of the earliest Daguerreotypes made in this country was the work of the late Mr. Geo. Slaw, and Dr. Hill Norris, who became the first president of the society, patented a collodion dry plate as early as 1855.

The first society was founded in Birmingham in 1856, with Mr. W. B. Osborne as honorary secretary. One of its objects was to build a gallery for the exhibition of members' work, but before this was realised a heavy deficit on an exhibition brought the society to an untimely end. The society lived long enough, however, to develop considerably the art of photography in Birmingham, and one of its achievements was the raising of a fund to induce Poncey to reveal the secret of his carbon process. W. Willis, the inventor of platinotype, was a member of the society, and another Birmingham man, Alex. Parkes, made a substance which he called Parkesine, now largely used as a basis for celluloid films.

The present society began in a very modest way in a room at the Technical School. In 1837 the question of photo-survey work was introduced by Mr. W. Jerome Harrison, and taken up by Sir J. B. Stone, who had been privately engaged in securing records for many years. The National Record

Association was formed, and was instrumental in supplying the British Museum with valuable records of old customs and contemporary events. After holding several successful exhibitions in the Exchange Rooms, the society received artistic recognition by being invited to hold its exhibition at the Royal Society of Artists. Photographers from all parts of the world now send pictures to this exhibition. The society will continue to hold the annual open show in the rooms of the Royal Society, but it is intended to hold periodical exhibitions of members' work in the new rooms.

Correspondence.

The Editor is not responsible for the opinion of his correspondents.

DOES THIS CAP FIT?

Sir,—Recently I visited Broad Ha'penny Down, Hambleton, to see the "Cricket" memorial stone which has been erected there. It is a few feet inside an oak fence, and the only possible place from which to get a photograph of it is the upstairs window of the Bat and Ball Inn opposite.

The landlady told me that forty or fifty photographers had made use of the room for that purpose without payment, and that though most of them had promised to send her a picture or a postcard for her kindness, not a solitary one had come to hand up to October 5th.

I consider it disgraceful to take such a mean advantage of anyone's good nature, and I appeal to any of the fifty who should read these notes to hurry up and keep their word, and not to give the inhabitants of the district further reasons to discuss their meanness.

Yours, etc.,

A MEMBER OF THE PORTSMOUTH CAMERA CLUB.

Photographing Semi-opaque Objects.

BY H. E. BLACKBURN.

I WANTED to get some good negatives of autumn leaves, and for the benefit of others who may at some time wish to photograph something of a like nature, I give a sketch and describe a simple piece of apparatus which I employed.

The tripod is a piece of board A with a slot running through its centre, as shown at B. A common bolt with nut and washer is inserted through the back of an ordinary dresser or other piece of heavy furniture that can be pressed into commission. A winged nut as shown at C will be an added convenience, as it can be tightened up without the use of a wrench. From the upright piece an arm D is fastened and strengthened with two or more simple brackets such as can be obtained for a few pence at any hardware shop. This arm D terminates in a small piece of board E placed parallel to the upright piece and fitted with a hole to engage the shank of the ordinary tripod screw. The whole thing is easily set up, and the length of the slot B provides for considerable range of position.

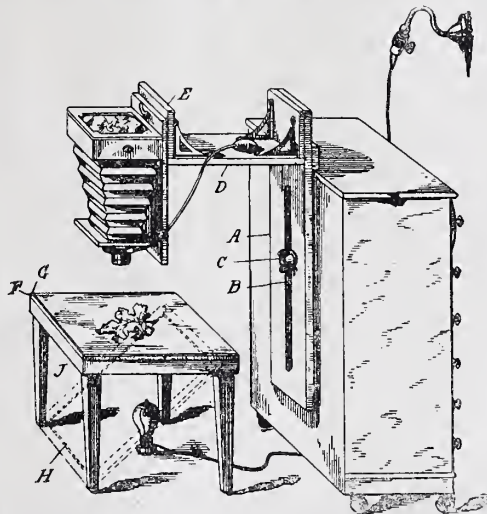
The real advantage of this method of working is due to the plan of supporting the leaves over an illuminant that will give some light through them from below while they are also being illuminated from above; and it also has the added

advantage that it permits the photographer to arrange the subject leisurely so as to get the best effect and without the fear of any movement.

This is done by making a small frame J upon four legs to support a sheet of ground-glass, matt side uppermost, as shown at F. A sheet of light yellow paper G can be used on to of the glass if thought best to cut off the excess of violet rays. On this glass or paper the leaves are arranged, an ordinary incandescent electric light being placed below and connected with a bracket as shown. The exposure is made while the leaves are illuminated both by the electric light below and a stronger light from above. The results secured will surprise one who has tried to photograph such things in the usual manner. There is secured a suggestion of colour and texture that it is practically impossible to obtain when working by ordinary direct lighting.

By placing a mirror H, shown in the dotted line in the sketch, at an angle of 45° and below the glass surface of the stand, daylight can be used for both the direct and reflected light. If this is done, the legs supporting the ground-glass frame should be made of sufficient length so that the mirror H can be

illuminated by light that is not intercepted by the top of the stand. ("Camera Craft.")



Three Curious Optical Illusions. By Prof. G. Michaud.

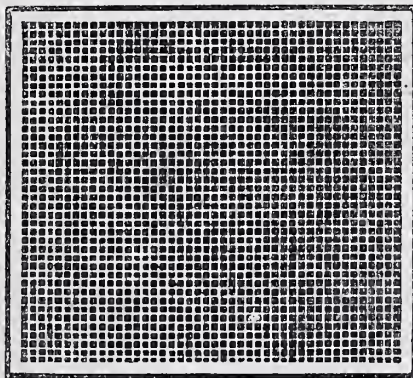
THE accompanying drawing apparently shows a dark field crossed by white lines. Yet if, instead of being examined at the ordinary distance, it be placed at about one inch from one eye, this being kept at rest as if looking at some distant object, the figure will be reversed, i.e., dark lines will appear on a white field.

Owing to the very small distance between the eye and the figure, the rays emitted by the white lines come to a focus far behind the retina. The convergent beams which have crossed the crystalline lens strike the retina as wide luminous stripes, leaving but very narrow dark boundaries between them. These appear as black lines on a white field.

The other transformations, by far more curious, take place when the same figure is seen through a narrow slit made with a single stroke of a penknife into a piece of dark coloured pasteboard. The slit is kept all the time vertical, close to one eye, the other being shut. The figure, thus examined at a distance of about an inch, will appear to be made up entirely of vertical lines, the horizontal lines having apparently vanished. Vision in that case is distinct. The vertical lines are seen nearly as sharply as in the case of vision at ordinary distances. This is not extraordinary if it be borne in mind that the slit decreases the width of the luminous pencils, and prevents the formation of diffusion circles in a

horizontal direction only. It acts as a diaphragm for the vertical lines, and renders no such service to the horizontal lines. But if the figure be now withdrawn to the distance of one or two feet, the slit remaining in the same vertical position and all the other features of the experiment remaining unchanged, it will be found that the horizontal lines, which had vanished, have reappeared, while the dark, sharply cut, vertical lines have entirely disappeared. At a distance of one inch the figure was exclusively made of vertical lines, at a distance of one foot it contains horizontal lines only.

Diffraction is the agent of the queer transformation. The rays which have passed through the narrow slit interfere, and the result of their interference is a general blurring and blending of the vertical lines. When these were at but a small distance from the eye, their image was large enough to remain quite indistinct in spite of a slight blurring of the edges. But as the distance increased, the image became smaller and the blurring relatively more and more important until it caused the image to disappear. As to the horizontal lines, the extension of the slit in the vertical direction is such as to prevent diffraction from blurring their horizontal edges. Moreover, they are now at the distance of distinct vision, and their image is clearly formed on the retina without any diaphragm. ("Scientific American.")



AN OPTICAL ILLUSION.

Viewed through a vertical slit, only the horizontal lines show; but if the figure be held close to the eye only the vertical lines appear.



BEGINNERS' COMPETITION.

Given to all photographers who have never taken an award.

PRIZES.

First Prize.—A signed copy of "The Complete Photographer," a half-guinea work by Mr. Child Bayley, now in its second edition.

Second Prize.—A free subscription to *Photography and Focus* for twelve months.

One or more certificates of honourable mention will also be awarded.

RULES.

(1) Each competitor can send as many prints as he likes, but each print must bear on the back the coupon, published each week, the name and address of the sender, the title of the picture, and no other writing whatsoever.

(2) No print will be eligible that is larger than 5½ in. x 3½ in. (postcard size) or 5 in. x 4 in.

(3) No print must be mounted.

(4) No handwork other than simple spotting is permitted on negative or print, nor shading or dodging of any kind. It is distinctly understood that entry in the competition implies a declaration by the competitor that this rule has been complied with; and in case of dispute, the editor shall have the right to call for the negative from which the entry purports to be a simple direct contact print.

(5) No prints will be returned, and no correspondence with regard to the competition can be undertaken.

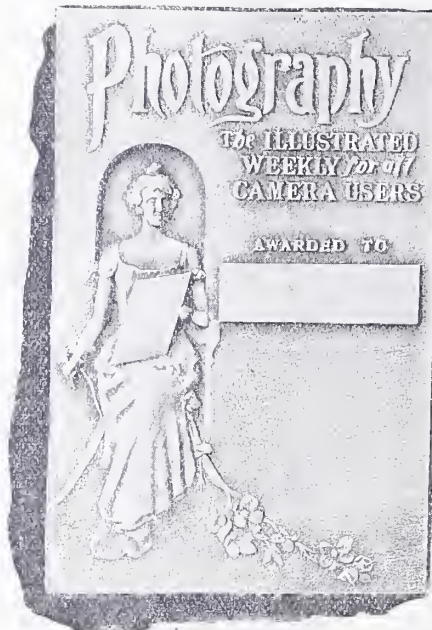
(6) The publishers of *Photography and Focus* shall have the right to reproduce, without payment, any of the prints sent in, winning or otherwise. But except the winning prints, the names of competitors of other prints that may be reproduced will not be published without the competitor's consent.

(7) All entries must be addressed "Beginners' Competition," the Editor of *Photography and Focus*, 20, Tudor Street, London, E.C., and must be delivered at that address by the first post on the closing date at the very latest.

CLOSING DATE.—Saturday, Oct. 31st.



"Photography" Medal. Actual size.



"Photography" Plaque. Actual size.
Weight in silver over three ounces.

ADVANCED WORKERS' PRINT COMPETITION.

PRIZES.

First.—"Photography" Silver Plaque.
Second.—"Photography" Bronze Plaque.
Third.—"Photography" Bronze Medal.
One or more certificates of honourable mention will also be awarded.

RULES.

(1) All photographs must be sent addressed "Advanced Competition," the Editor of *Photography and Focus*, 20, Tudor Street, London, E.C., postage paid, to reach there not later than the first post on the closing date, and must contain a stamped addressed envelope or label (not loose stamps) if they are to be returned.

(2) Each photograph must be mounted, but not framed. Prints in slip-in mounts are not eligible. Each must bear on the back the name and address of the sender and the title of the picture. No letters or other communications must be enclosed with the prints. Every print must bear attached to its mount a coupon for the competition of the month, which will be found in each issue of the paper.

(3) Each photograph must be the work of the competitor as regards selection and arrangement of the subject, exposure and development of the negative, and printing, development or toning, and mounting of the print.

(4) The prints which are accompanied by stamped envelopes or labels will be criticised by post, and the editor shall have the right to reproduce any of the prints, winning or otherwise. The awards will be made a fortnight after the closing date.

(5) Awards may be increased or withheld at the absolute discretion of the judge, and in all cases of dispute the decision of the editor will be final.

(6) There is no restriction as to the eligibility, except as set forth in these rules, and except that the same negative must not be used more than once in the competition. That is to say, that a print from it once submitted, all further prints, however varied, are ineligible.

(7) Neither editor nor publishers of *Photography and Focus* shall be held in any way responsible for the safety of prints or for their return to the competitors.

(8) The sending of a print to the competition will be regarded as a declaration to the effect that it is eligible under these rules, and that the competitor agrees thereto.

CLOSING DATE.—Saturday, Oct. 31st.

SPECIAL SUBJECT COMPETITIONS. OPEN TO ALL READERS.

PRIZES.

First Prize.—"Photography" Plaque in Silver.
Second Prize. "Photography" Plaque in Bronze.
Third Prize. —"Photography" Medal in Bronze.
One or more certificates will also be awarded.

RULES.

(1) The subject of each photograph entered must be that announced for the particular competition.

(2) Each competitor can send as many prints as he likes, but each print must bear on the back the name and address of the sender, the title of the picture, and no other writing whatsoever. Each print must have attached to it a coupon for the competition of the month, which will be found in each issue of the paper.

(3) No print must be mounted. No handwork other than simple spotting is permitted on negative or print, nor shading or dodging of any kind. It is distinctly understood that entry in the competition implies a declaration by the competitor that this rule has been complied with; and in case of dispute, the editor shall have

the right to call for the original negative from which the entry purports to be a simple direct contact print.

(4) No prints will be returned, and no correspondence with regard to the competition can be undertaken.

(5) The publishers of *Photography and Focus* shall have the right to reproduce, without payment, any of the prints sent in, winning or otherwise. But except the winning prints, the names of the senders of other prints that may be reproduced will not be published without the sender's consent.

(6) All entries must be addressed "Special Subject Competition," the Editor of *Photography and Focus*, 20, Tudor Street, London, E.C., and must be delivered at that address by the first post on the closing date at the very latest.

SUBJECTS AND CLOSING DATES.

A Portrait of a Lady. Closes Saturday, October 31st.

A Domestic Interior. Closes Monday, November 30th.

A subject suitable for use as a Christmas or New Year Card. Closes Thursday, December 31st.

Photographing Interiors of Ordinary Rooms.

BY J. OSGOOD. Special to "Photography and Focus."

Interiors can be taken without special apparatus or materials. Hints on the work, on arranging the rooms, on exposure, on wide angle lenses, etc.



ONE of the subjects which the amateur photographer sometimes attempts—not always with success—is a view of the interior of some room at home. It is not an easy task in many cases, although it is free from most of the difficulties which trouble him in his other work. The lighting is often very much under control, the subject will remain still for just as long as he likes to expose, and the arrangement is largely what he chooses to make it. Where, then, are the difficulties?

The causes of failure may be several. For one thing, the room may be so small that the comparatively narrow angle lens on the camera will not show more than just a corner of it on the focussing screen. Then in the strength of the lighting it is so totally different from what is dealt with out of doors that the exposure problem becomes truly a problem. Finally, the room which in reality does not seem in the least over-furnished, in a photograph often seems to be uncomfortably crowded with objects. Some suggestions on the subject may therefore be found to be of service.

Considering the question of suitable apparatus for this class of work, it may be said that it is a mistake to suppose that home interiors can only be taken with some special form of camera or lens. A stand camera with a rapid rectilinear or other non-distorting lens of comparatively short focus is the most convenient, but excellent little negatives can be made with any of the ordinary forms of hand camera if attention is given to a few little points.

If the hand camera is of fixed focus type, and has no ground-glass, the picture must be arranged as best one can manage it with the finder. To do this, the camera should be put as far away from the particular part of the room which is to form the subject as it can be got. All chairs, tables, or other objects near the camera likely to come in the field of view should then be removed.

The lens for this work may be whatever the photographer is accustomed to use in the ordinary way. An anastigmat which will include a wide angle is the most convenient, but as there is no great drawback involved in the use of a small stop it is certainly not a necessity. The chief trouble will be

if the lens does not include a wide enough angle. This may be dodged by limiting one's self to subjects which do not call for a wide-angle lens; or a supplementary magnifier can be employed, as described in a *leaderette* recently in *Photography and Focus*.

If the lens is provided with stops, the smallest stop should be used. It will lead to the exposure being considerably prolonged, but is a necessity if the nearest objects are to be sharply defined. If the camera has a focussing screen, the arrangement of the subject can be carried out with more nicety, and it is not imperative to use the smallest stop. We can use the largest that we find will give a picture that is sharp all over. If the camera is fitted with dark slides, we must make sure before doing the final focussing that the shutter can be drawn out, or we may find that all our trouble has been wasted, owing



Sunshine.

By Fred Pulley.

to the wall or some fixture being in the way. This is very likely to occur in work of this sort, as the camera usually has to be put in some extreme corner to get far enough away from its subject.

This matter of the position of the camera is one that should receive careful attention. Every foot, every inch almost, is of importance very often. Sometimes a cupboard door may be opened or a window utilised to get the camera a little further from the subject. When it has to back up against a wall, there is no need to leave sufficient room for the photographer to get right behind it to focus. A small piece of looking-glass can be used with which to see the focussing screen, which may then only be a few inches from the wall. When it is a very tight fit, we have heard of the camera being set up at right angles to its subject, with a mirror in front of the lens, so that it is the reflection that is photographed. This gives us a print which, made in the ordinary way, is reversed right for left; but if the negative is only to be used either for enlarging or for printing in carbon by single transfer, this can be remedied easily.

For indoor work the tripod is not of much use. It is awkward to manipulate, the legs take up a lot of room, and it is much easier to put the camera on a little table or other steady support, with a weight on the top of it, if necessary, to prevent it from shifting about. A couple of chairs, back to back, will form a temporary support, or even one chair or a box. Any of these will allow the camera to go close against the wall, which is what a tripod will not do.

Having decided upon the position of the camera—which should not be too low, or a false impression will result—it should be carefully levelled. This is important, in indoor work especially, because we are very likely to find that we have got vertical straight lines near the edges of the picture, which will show at once if the levelling has not been properly done. The focussing cloth should be a big one, as the subject is likely to be dark, and if it is to be seen properly on the ground-glass every bit of light at the back of the camera must be excluded.

Any make or brand of plate, except those which are made specially for process work, may be used satisfactorily for interiors. My preference certainly is for the very rapid plates to which I am accustomed for hand-camera work, because I am used to their behaviour in development, and, being very fast, the exposure they call for when employed indoors is a short one. But except for this last, a slow make would do just as well, and even better, as slow plates being generally more opaque are less liable to halation. But whatever may be the make of plate that is selected, it must be backed. I prefer to buy the plates backed, as this avoids the rather messy operation of backing them. If the plate is unbacked, there will be trouble from halation.

The development of such subjects calls for a few remarks. If the amateur has been accustomed to landscape work, he will probably over-develop any interiors he may tackle; but if portrait work is what he is used to, he is not likely to be very far wrong. The fact is that contrasts are plentiful in the subjects which we are considering, and we have to be careful, therefore, to keep the negatives on the thin side, if we want to get a harmonious print. We must guard against over-development therefore. Some authorities recommend

diluting the developer more than usual for this purpose, but it is simpler to employ the ordinary strength of solution, merely taking care to stop development soon enough.

The success of a photograph of an interior depends, after all, more upon the subject than on any other one factor whatever. We must be very careful not to get a result which looks as if the room had been arranged for the purpose of photography; on the other hand, it will be very seldom that we shall be able to get a satisfactory result without a little arrangement of some kind. One of the first things to do is to see that there are no objects at the edges of the picture which are unpleasantly foreshortened. The presence of these is a very common defect in work of this kind. An oval table may be so distorted in this way that its image forms a puzzle which everyone tries to solve as soon as he sees the print, to the complete destruction of its pictorial appeal. Bright spots caused by reflections from a mirror or the glass over a picture are things to be watched for. A cork or a piece of paper put behind the offending object will often alter its angle sufficiently to remedy what otherwise might be a very serious defect. Excessive detail in the way of furniture, ornaments, etc., should be avoided. In fact, it is a good method, when the subject generally has been selected and arranged, to go over it to see how much can be removed with advantage. Some rooms are crowded with things which individually may be very charming, but collectively are worrying.

In arranging the subject, the position of the window is very likely to give trouble. Now some most effective interiors have been got in which a window has figured, and as the principal high light of the picture it has played a very important part in its success. But as I am writing this article for beginners in photography, I can only advise them—at any rate, for their first attempts—to be careful to keep the window out of the picture. If the exposure may be a long one without inconvenience, it will be found a very good plan to cover the window with tissue paper. This may make the necessary exposure three or four times as long as it would be without it, but by diffusing the light it will make the shadows brighter and help to give a softer result. And in interior work anything that helps us to get a more harmonious negative is an advantage.

There is only one way to find out the correct exposure in interior work, and that is by the use of an exposure meter. As the light is often not strong enough to allow us to use the meter in the ordinary way, as it would take too long to darken to the standard tint, the strength of the light may be measured by tearing off a little piece of the sensitive paper of the meter (Watkins), covering it partly with a coin, and noting how long it takes for a perceptible difference to manifest itself between the covered and the uncovered portions. The exposure should be made at some part of the subject which is not the brightest or the darkest, but about midway between the two, and the paper should face the source of light. If a very fast plate is used, with $f/16$ in the lens, the exposure required will be about one-half the time which the paper took to show a distinct difference between its exposed and unexposed parts. It is a safe rule in interior work, if there is any uncertainty about the exposure that is required, to give the longer rather than the shorter time.

The September Special Subject Competition.

THE Special Subject Competition this month was for "a seaside scene," and brought forth an unprecedentedly large entry, which included a lot of really first rate work. The subject for this competition was so general in character, that the judging became more than ordinarily difficult. It may not always be easy to decide upon the best prints amongst a lot all of which are harvest pictures, or flowers, or domestic animals. But when they range over all the varied subjects, any and all of which may fairly be described as "seaside scenes," from bathing subjects, groups of fishermen, to yachts and breaking waves, the task is much harder.

We are glad to note the revival of interest in these special subject competitions—a revival that coincides with the end

of the holiday season. We announce two more this week, bringing the series down to the end of the year, and hope that all will be as well supported as the one just closed.

Awards.

FIRST PRIZE.—*Photography* silver plaque, "A Confidential Chat," T. C. Beynon, Cheriton, Newbury.

SECOND PRIZE.—*Photography* bronze plaque, "Sea Urchins," J. Herbert Saunders, 2, Roger Place, Skinner Lane, Leeds.

THIRD PRIZE.—*Photography* bronze medal, "Sea Horses," Clarence Ponting, 17, Oak Lane, Manningham.

CERTIFICATE.—"The billows hoarsely chafe the shore," J. H. Spree, 73, Warrior Square, St. Leonards-on-Sea.



MORNING.

The original of this picture is No. 51 at the Exhibition of the Royal Photographic Society.

BY MRS. G. A. BARTON.



INTO THE CHOIR, CHRIST CHURCH, TWYNHAM.

J. R. H. WEAVER.

The original of this picture is No. 22 at the Exhibition of the Royal Photographic Society.

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ADVERTISEMENTS.—All communications on advertisement matters should be addressed: The Advertisement Manager, PHOTOGRAPHY AND FOCUS, 20, Tudor Street, London, E.C. All copy for displayed advertisements for the issue of any particular week must reach Tudor Street by the first post on Monday morning in the week previous.

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PROFESSIONAL AND TRADE.—Three words 2d., minimum 1/-.

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BOX NUMBERS.—For the convenience of advertisers, letters may be addressed to numbers at the office of the paper. When this is desired, 2d. will be charged for registration, and three stamped and addressed envelopes must be sent for forwarding replies. Only the number will appear in the advertisement. Replies should be addressed: "No. 000, c/o PHOTOGRAPHY AND FOCUS, 20, Tudor Street, London, E.C."

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ADDRESS.—All communications for the Editor should be addressed: The Editor, PHOTOGRAPHY AND FOCUS, 20, Tudor Street, London, E.C.

TO CONTRIBUTORS.—The Editor will be glad to consider original up-to-date manuscripts on photographic subjects. All contributions must be typewritten, or in very legible handwriting, on one side of the paper only, and should bear the name and address of the sender. Letters or communications arising out of matters already appearing in the paper are not paid for. The Editor disclaims legal responsibility for the safety of matter submitted to him, but he will endeavour to return rejected manuscripts, etc., when a stamped addressed envelope is enclosed for that purpose. No notice whatever can be paid to communications without the name and address of the sender, nor necessarily for publication.

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PAYMENTS.—Articles and illustrations are paid for on acceptance.

INTERVIEWS.—The Editor will be at 20, Tudor Street, on Wednesdays, between the hours of 9.30 and 11.30 a.m., but can only be seen at other times by appointment.



CHISWICK CAMERA CLUB. Mr. W. H. Cook, of Homersfield, Boston Park Road, Brentford, the honorary secretary, will be glad to get into communication with anyone contemplating membership.

THE QUARTERLY PHOTOGRAPHIC PORTFOLIO is a new society, limited to twenty-four members, with an annual subscription of 2s. 6d. Particulars can be obtained from the honorary secretary, Mr. Leonard G. Castle, of Dahetree, Sutton, Surrey.

THE ST. HELEN'S CAMERA CLUB exhibition follows the Northern at Manchester, and pictures will be conveyed from one to the other free of charge. Particulars can be obtained from the honorary secretary, Mr. John Glover, of 14, Ormskirk Street, St. Helen's.

"**ENLARGERS AND ENLARGING**" is the title of the price list issued by the Midland Camera Co., Ltd., of Slaney Street, Birmingham. In addition to particulars of the apparatus for enlarging made by the company, it contains a number of useful hints on the employment of enlargers generally.

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ON LANTERN SLIDE MAKING. Mr. G. J. T. Walford, at the Southend-on-Sea Photographic Society, said that he employed Paget slow lantern plates, and to obtain warm tones over-exposed, developing them with a very weak hydrokinone developer (Lockyer's). He used a sable brush for spotting purposes.

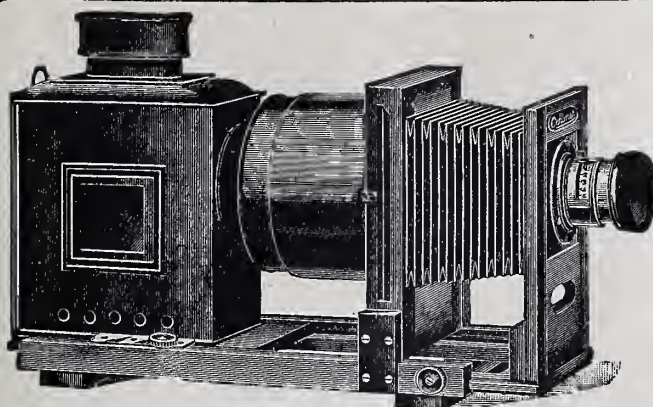
THE GOERZ LECTURES. The C. P. Goerz Optical Works, Ltd., of 1-6, Holborn Circus, London, E.C., have a number of lectures illustrated with lantern slides, which they are prepared to lend to photographic societies that have vacant dates. No charge is made, but each society is expected to pay carriage one way.

THORNTON-PICKARD ENLARGERS. In our notice of these, on page 474, last week, the last paragraph but one should read "no racking frame," not "no rocking frame." The B model referred to is provided with the swinging motion to the negative carrier, just as in Model A, but has no bellows extension frame, front, and lens, as these are provided by the user's camera.

MORE THAN DOUBLE THE NUMBER. The Birmingham Photographic Co., Ltd., of Stechford, write us as follows: "You will be pleased to hear that in our competition ending on September 30th we have had more than double the number of entries in any other competition, and it has only been advertised in your paper." Under the circumstances, those of our readers who have sent in to the competition will understand any little delay there may be in the publication of the result, and will not be impatient.

MR. CRAIG ANNAN, lecturing before the Glasgow Photographic Art Circle on photography as a means of artistic expression, said, in reply to the question that was often asked if photography can be a means of artistic expression, that he would most unhesitatingly reply in the affirmative. Each art describes some aesthetic quality, and in this respect photography was no exception. At first photography was at a disadvantage, as it was taken up by those who were for the most part of a scientific turn of mind, and they are generally devoid of artistic imagination. Prints were made by them and shown, and the accredited artists looked askance at the productions of the scientist. Many of the same class at one time thought Whistler as a painter an impertinent charlatan. It is being realised now that a new art craft is being evolved with pictorial photography, one that has not yet achieved any commercial status. One cannot, of course, expect the patron to anticipate the process, and collectors are to be excused until the artistic side of photography becomes more established. One of the earliest artistic photographers, D. O. Hill, while an artist, was for a time much engrossed in photography, and found it a medium capable of expressing his noble thoughts.

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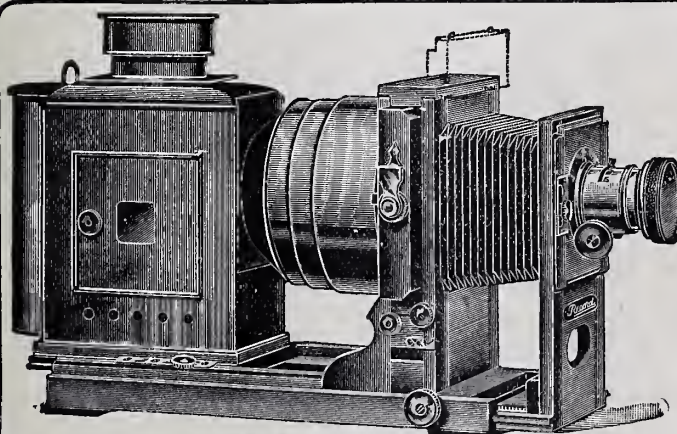
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EASTMAN KODAK CO., OF NEW JERSEY. The directors have declared an extra dividend of 5% upon the common stock, payable December 1st, 1908, to stockholders of record at the close of business on October 31st.

FLOWER PHOTOGRAPHY. Mr. E. Seymour told the Southend-on-Sea Photographic Society that he freely used wire, pins, etc., to get his subject into the position he desired, and photographed flowers life size, as he thinks enlarging is unsatisfactory. He exposes fully, without a screen, on Barnet orthochromatic plates, develops with pyro, using no bromide, and stops development as soon as density in the high lights is sufficient, intensifying afterwards if necessary.

THE BORDESLEY DUPLEX Tinto-board Mount is made by Messrs. J. and W. Mitchell, of Bordesley Paper Works, Birmingham. The mounts are of agreeable "art" tints, such as duffel grey, moss green, and brown, and are put up in three sizes, suitable respectively for quarter, 5 x 4, and half-plate prints. The price of the packet is 6d. The "Duplex" refers to the double character of each mount, being different in colour on its two sides. These mounts are very suitable for photographs.

A TIP. Mr. W. J. Wilson, of the Vicarage, Dalston, Cumberland, writes, "I find that old printing paper envelopes are excellent protectors for single metal dark slides." Quarter-plate Excelsior slides fit postcard envelopes very well, and these then protect them from light and from rubbing together. No doubt other sizes will be found equally well suited to each other. If the envelopes are fastened down with a touch of mountant there is little likelihood of putting two exposures on one plate.

ON STORING NEGATIVES. Mr. D. Walder writes: "Having read your editorial of September 29th on this subject, I thought my method of registering and storing negatives might interest and prove of use to some of the many readers of *Photography and Focus*. I have an ordinary varnished whitewood box with fifty grooves (bought for 1s., quarter-plate size), in which are put my negatives. When this gets filled up, I remove Nos. 1 to 12, wrap them in paper, and put them into one of the boxes in which they were originally bought. When more negatives are made and put in the grooved box Nos. 13 to 25 are removed in the same way, and so on. These boxes are stocked away in a clean dry cupboard, and a small label stuck on one end giving the plate numbers contained in it thus, '371-382.' I then keep a list made out in a small book. When any particular plate is required I just turn up the register, find its number and open the box that contains it. I have some hundreds stocked away in this manner, and have never had any fault to find with the method."

ENTRIES FOR THE HACKNEY Photographic Society's exhibition close on Monday, October 26th.

DONCASTER CAMERA CLUB. The honorary secretary is now Mr. Fred A. Jordan, of Claremont, Windsor Road, Doncaster.

INSTRUCTION IN PHOTOGRAPHY is given at the Brownhill Road Science and Art Centre, Catford, on Thursday evenings at 7.30. Further information can be obtained from the secretary at the school.

AN IRISH POSTAL CLUB. A pictorial photographic postal club is about to be formed, the membership of which will be limited to photographers residing in Ireland. Further particulars can be obtained on application to the honorary secretary, Mr. Thomas A. Conroy, Smithville, Wellington Bridge, Cork.

WORK ON NEGATIVES. Referring to Mr. Wild's article in last week's *Photography and Focus*, in which he dealt with abrasive pencils, Mr. J. Arthur Lomax, of 16, Burlington Terrace, Cardiff, writes: "I have for some time used Bruce and D'Anters 'Negafake' pencils with success, and have never found them to scratch."

THE POLYTECHNIC, REGENT STREET, London, W., has a flourishing school of photography and photo-engraving, under the direction of Mr. Howard Farmer. The opening night of the session is always quite a function, and in this respect the meeting on Tuesday last, the 13th inst., well maintained the tradition of the institution. A feature of the meeting was the projection of a large number of Autochrome slides, awards being bestowed upon these by the vote of those present. A short address entitled "From Shade to Sunshine in Photography" was given by Mr. Howard Farmer.

A PHOTOGRAPHER DROWNED. Professor Van Jan, of Strasburg, who was staying at Scilly, was drowned on the 13th inst. According to the *Daily Mail*, he went to Peninnis Head, "accompanied by a lady, for the purpose of taking photographs, and leaving the lady at the top of the cliff reading, he descended to the rocks below, presumably to take photographs of the breaking sea. After the Professor had been absent about half an hour his companion became uneasy and began to search for him. She received no answer to her repeated calls, and when she saw his cap floating in the water she ran for assistance. The party with whom she returned searched the rocks and crevices, but no further trace of the Professor could be found. The rocks are very slippery, and it is feared that he slipped while endeavouring to get in a good position to take a photograph of the sea. He carried a large camera slung on his back and wore a long loose overcoat, which would hamper his movements in the water." We learn since that Professor Van Jan's body has been recovered.

AUTOCHROME SLIDES were shown at the Cold Storage Congress at Paris last week by Miss Pennington, representing the chief Food Research Laboratory of the United States Department of Agriculture. The slides were used to illustrate the cold storage of poultry, and were found to answer the purpose admirably.

THE LUXOL LAMP is one which is being put forward as suitable for dark room lamps. It burns petroleum, and the makers claim for it absolute safety. The lamp may be burned 180 hours for one penny, without smoke or smell, the wick is imperishable, and if the lamp is upset or dropped it merely goes out. There is no oil that can be spilled. The claims seem to be well founded. The reservoir is filled with an absorbent material which holds all the oil, and supplies it as required to the wick, so that spilling is out of the question. The price of the lamp is 6d.

PORTRAITURE. Mr. C. Wille, lecturing before the South Essex Camera Club, said he preferred a whole-plate camera for this work, as enlarging meant loss of quality and tone at both ends of the scale. Detail should be subdued everywhere, except in the face. It was well to take the sitter, if possible, in his own sitting room, in his own easy chair, and amongst familiar surroundings. Too much top light must be avoided, the sitter should be placed well away from the wall, and a large reflector used, but not too near the model.

HANDY BOOKLETS.

IT is a great thing to have a little summary of the manipulation of plates or papers, telling exactly what one needs to know about them, no more and no less, in so compact and handy a form that it can be slipped for ready reference into a pocket-book, where it will take up no more space than does a season ticket. That is exactly what is now being issued by Messrs. Wellington and Ward.

The firm we have just named has published two neat little booklets—"Notes on the Use of Wellington Bromide" and "Notes on the Use of Wellington S.C.P." Each only runs to fifteen or sixteen pages, but it gives a clear outline of the use of the paper with which it deals, a table of exposures with different illuminants, and particulars of development, fixing, etc.

There must be many of our readers who are thinking of taking up bromide or gaslight work this winter. We should strongly advise all of them to send a postcard to Messrs. Wellington and Ward, Elstree, Herts, asking for copies of the bromide and gaslight booklets. They will be sent free of charge, and will be found to tell the would-be user of the paper exactly what he wants to know. The same firm announce other booklets dealing with plates and films as being in preparation.



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THE CRIVEN PHOTOGRAPHIC WORKS, *Septon*, have been removed to more convenient premises at 62, Belgrave Road, Keighley.

THE BOROUGH POLYTECHNIC Photographic Society at its annual meeting elected Mr. E. H. Roberts president, and Mr. A. G. Buckham, of 103, Borough Road, London, S.E., honorary secretary.

THE ACTON AND CHISWICK Polytechnic Camera Club meets on Friday evenings at eight. The honorary secretary, Mr. A. G. Field, will be glad to supply full particulars on application to him (in writing), at the Polytechnic, Bath Road, Bedford Park, W.

THE OLIVER GOLDSMITH Photographic Society's session commenced on October 16th. The honorary secretary, 8, Adys Road, East Dulwich, S.E., will be pleased to send full particulars on application.

THE BIRMINGHAM Photographic Society has inaugurated its new premises at No. 30, Exchange Buildings, New Street, Birmingham. The society now offers, in addition to its regular weekly meetings, a dark room fully equipped for enlarging, a reading room with journals and reference books, and a library of about 600 volumes. Mr. Lewis Lloyd, Church Road, Moseley, is the honorary secretary, and will be glad to give further information to photographers who may be thinking of joining the society.

THE MARION COMPETITION, which is divided into four sections, (1) open, (2) beginners, (3) moving objects, and (4) scientific, closes on October 31st. We would remind readers that Messrs. Marion and Co. are offering most substantial cash prizes, from £50 down to 10s. 6d., as well as a Soho Reflex camera with Goerz lens, in this competition, full particulars of which can be obtained from any dealer, or will be sent direct on receipt of a postcard addressed to Marion and Co., Ltd., 22-23, Soho Square, London, W. We hear that there is every prospect of the competition being a great success.

THE WALTHAMSTOW PHOTOGRAPHIC SOCIETY opened its winter season on the 19th inst. Photographers in the district wishing to become members are invited to apply for particulars to the honorary secretary, Mr. Thos. R. Nunn, of 29, The Drive, Walthamstow.

SPOILT PRINTS on bromide or gaslight paper, or spoilt pieces of the paper not yet printed, make excellent transfer paper for carbon printing. In the case of prints the image must first be removed by the ferricyanide and hypo reducer; unprinted paper is simply fixed and washed. The clean papers are then placed dry in a solution of

Water	...	...	9 ounces
Formaline	...	...	1 ounce

washed and dried. They can then be used exactly like ordinary transfer paper. ("Die Photographie.")



The Rakings.

By C. H. Stableford.

NOT THE CAMERA BUT THE MAN. Mr. Thomas M. Parker, who was awarded the bronze plaque in our "Harvest" Special Subject Competition, writes, "As exemplifying a point so often mentioned by you, I would like to mention that the winning photograph was taken in a box form, fixed focus hand camera, for which I paid 19s. 6d. (new) some years ago, and at the present time a similar article could probably be purchased for a still smaller sum. Although I am now the happy possessor of a much more efficient outfit, I frequently have

produced are of French origin, as is only natural. They form a very fine and representative collection of the pictorial work of that country, and the book as a whole is well worth the twelve francs asked for it. Unlike most works of so professedly a pictorial character, this contains a number of excellent articles on technical subjects, and there are reviews of photography in Britain by Mr. George Davison, in America by Mr. Yarnall Abbott, and in Italy by Count L. de Courten. The publishers are the Photo-Club de Paris, 44, Rue des Mathurins, Paris.

The Advanced Workers' Competition for September.

JUDGING a large regularly recurring competition like this one provides overwhelming evidence of the extent to which a pictorial worker when he gets to a certain stage can impart his own personality to his work. Sometimes, of course, it may be only by some little trick of toning or of mounting, or some other detail of that character, but often the personal touch, though unmistakable, is almost intangible.

As we go quickly through the competing prints to make the first preliminary selection before actually making the awards, picture after picture turns up, "signed all over" as the saying is, by slight but unmistakable indications of its author. There is no need to look at the writing on the back to see who is the competitor who sends it in. The competition which has just closed contained quite a remarkable number of prints of which this could be said, depend-

ing largely as it does upon the work of regular monthly competitors. For the rest it was about up to the general level in numbers, and very much the same in the average quality. The work on the whole was good, but could hardly be described as striking. The following are

The Awards.

SILVER PLAQUE.—"Interested," by E. F. Gilbert, 219, Shrewsbury Road, Forest Gate, Essex.

BRONZE PLAQUE.—"Sunset on the Marshes," by W. J. Godkin, View Bank, Park Road, Clulwell, Notts.

BRONZE MEDAL.—"At the Dairy Door," by T. C. Beynon, Cheriton, Newbury.

CERTIFICATES.—"Sunshine," by Nurse F. C. Davis, Elmhurst, Hill Road, Weston-super-Mare; and "Across the Lake," by Chas. E. Craddock, 175, Castle Road, Bedford.

WELLINGTON

PLATES, PAPERS & FILMS



ISLE OF MAN RACES. (The Winning Car.)

Negative taken on a WELLINGTON 'Xtra-Speedy Plate. Exposure: 1000th second. Car travelling at 60 miles an hour.

PLEASE MENTION "PHOTOGRAPHY" WHEN CORRESPONDING WITH ADVERTISERS.



"The time has come, the Walrus said, to talk of many things."

WHEN I tendered some observations a few weeks ago on the subject of photographing other people's daughters a gentleman wrote asking what experience I had had in another branch of photography, to wit, instructing the fair sex in the delightful art. He further tried to tempt me into saying something on the subject by observing, "I have no doubt your advice will be useful." Perhaps it will. My advice is, to have nothing whatever to do with the fair sex at all under any pretext whatever, photographic or otherwise. As to my own experiences with the so-called fair sex, I am too old a bird to be betrayed into making damaging admissions in the pages of a paper that comes into my own home and the homes of scores of my sweethearts. If any lady asked me to give her some lessons in photography, I should refer her to the nearest chemist or dealer. At least I think I should. In most cases.

* * *

The gentleman who tried to entrap me into a confession admits that he himself received an invitation of the sort, and that he smacked his lips at the prospect. This shows that his experience is horribly limited. A wiser man would have shipped out to the antipodes by the first boat. I am sorry to have to expose the meanness of one of my own sex, but one of the chief reasons for his joy was that he saw an opportunity of unloading on the trustful maiden an antiquated camera that he had bought at a sale for a few pence. I hope this revelation will act as a warning to any young damsels who may be thinking of seeking photographic instruction from a perfidious man whom they first commission to procure the necessary outfit. Let them first assure themselves that he has nothing to sell. I, for one, have no apparatus for disposal.

* * *

Much as I regret the necessity, I must still further unmask the villainy of this designing man. Having foisted his useless camera on the maid, he actually anticipated taking her and it for strolls through "tree-darkened glades," under the shallow pretence of instructing her in landscape photography. This was bad enough, but worse remains to be told. Let his own words convict him. "I bethought me of the sensations of rubbing shoulders during the development stages." The wording is rather vague, but we all know what he means. He would not indulge in anticipatory gloats if it were his intention merely to rub his own shoulders. Then whose shoulders could he have intended rubbing? Mark the wide scope of the man's villainy. He sells the girl a wrong camera, takes her to quite impossible places to use it, and finishes by rubbing her shoulders in the darkroom when he ought to have been rocking the developing dish with both hands.

* * *

Here I must, in all conscience, utter a word of solemn warning to my male readers. If, in spite of my advice to the contrary, you feel that you may with impunity accept a lady as a photographic pupil, accept her—and the consequences. Sell her a useless camera if you like; take her through woodland glades if you will; shut yourself up in the dark room with her if you must, but don't rub her shoulders. Don't. Anything but that. For it is an absolute certainty that at the very first rub you will transfix your hand on a pin. I'm sure the scars on my own hands are enough to warn anyone off the grass; and, moreover, they constitute a standing reproach to feminine methods of fastening raiment.

* * *

To what lucky chance he owed it I know not, but this wicked person escaped after all. Don't imagine, my innocent young friends, that it would have been the lady pupil who would have come off second best. Oh, dear, no. She might have paid too much for her camera, but she would have

brought that man to heel in the long run. He might have imparted a few imperfect and incorrect instructions in elementary photography, but he would himself have learnt a thing or two before she had finished with him. Fortunately for him, he stopped in time.

* * *

It is a very curious coincidence that while I have been actually writing these lines a letter has arrived from an old reader asking for some photographic instruction from me. The English language is very ambiguous, and when I say an old reader I mean to convey the idea of one who has read this paper for a long time. In these degenerate days it is often difficult to distinguish between masculine and feminine handwriting. Many women write exactly like men, and many men write like paralysed cows. Therefore, as far as the handwriting of this letter goes I am left in doubt as to whether my correspondent wears hairpins or not. But there is one sentence in the letter that seems to settle the question. It reads, "Do set my mind at rest, there's a dear." That lets the cat out of the bag. Which is a proverb, and not a reflection on my fair correspondent. She—it must be a she—also observes, "I have got a kind of so near and yet so far feeling come over me which compels me to pen these few lines to you."

* * *

Oh, Angeline!

* * *

As far as I can make out the lady's request, it is that I shall apply my profound knowledge of photography to working out a good method of reproducing bank notes by means of the camera, and that I shall then "give her the wheeze," an expression which makes me again doubt Angeline's sex. In equally colloquial language I beg to reply that I am not having any. I believe Angeline is a thinly disguised sleuth-hound. But she won't beguile me into making photographic banknotes. I don't want my hair any shorter than it is, neither do I want to spend the rest of my life with broad arrows all over my pyjamas. Perhaps I know how to make photographic banknotes, and perhaps I don't. Mum's the word, and Angeline must seek a photographic mentor elsewhere. Not even her offer of a little bonus for myself at Christmas shall tempt me. If I can make negotiable banknotes on bromide or gaslight paper I don't want any bonuses. In short, once and for all, I am not available to impart photographic instruction of any kind whatsoever to any of my fellow creatures who wear blouses and the appropriate garments to accompany them. Let it be a man, and in whatever questionable shape he may come, I will gladly give him all the photographic information at my disposal; yea, and more also. But when I find designing females walking around with assumed innocence, or writing letters in endearing terms in their efforts to obtain masculine instruction in photography, I shall do my duty. And my duty is to fly a big red flag, and put up a massive board emblazoned with the word DANGER.

THE WALRUS.

SUBSCRIPTIONS.

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PHOTOGRAPHY

A JOURNAL FOR EVERY CAMERA USER.

EDITED BY R. CHILD BAYLEY.

PUBLISHED WEEKLY.

OCTOBER 27TH, 1908. TUESDAY. No 1,042. Vol. XXVI.



ROSES.

—
BY

THOMAS STEVENSON.



SPIRIT of the TIMES

Photographic Awards at the Franco-British.

The authorities of the Franco-British Exhibition have now issued the list of awards, and those which deal with "photography — photographic materials, appliances, processes, and products—

(Class 12, Group 3)" will be found this week on page 512. While

we congratulate heartily the firms who have had the merit of their exhibits recognised, we cannot help regretting that comparatively few of the leading British firms in the photographic industry were represented. The great majority of the awards, it will be seen, went to those who sent loan exhibits in the scientific section, the recipients being workers who have no commercial benefit to derive from their diplomas. Perhaps another year may see a greater display of what, after all, is essentially a British industry. Or perhaps the British firms are preparing an immense display for far off Dresden, with the idea of capturing German trade. Who knows? Certainly the few whose wares were brought prominently before the vast crowds who went to Shepherd's Bush must have secured a very excellent advertisement, although one of which the results may not be directly traceable.

Under-exposure.

The commonest defect in the whole of photography, beyond all doubt, is the under-exposure of the negative. Looking through the great mass of prints that were sent in to our Advanced Workers' Competition last month, we were struck by the number which showed signs of this defect, even in a competition where the average of work was as high as it always is in this. Under-exposure does not always manifest itself in the harsh blank whites and detailless blacks which some of the text books tell us are the signs of it. Strictly speaking, those are not so much signs of under-exposure as of over-development. In these days of time development, over-development is not so common as it used to be when the developer was strengthened and kept on in the hope that ultimately it might "bring out detail."

Nowadays we more often see the true signs of under-exposure unmodified by faulty development. These are a general want of contrast, heaviness in the shadows, and an absence of sufficient difference between the different tones of the picture except in the highest lights. The commonest case of all is that of the portrait with an unnaturally dark face. This is due primarily to under-exposure. In the case of landscapes, the sky alone is very often the only part which has true printing value; in the rest the detail may be visible, but it does not print out with sufficient contrast of light and shade. That, again, is the sign of under-exposure. Of course, in very bad cases there may be clear glass in the shadows, as is well known and understood at once; but it does not seem to be equally well known that a plate may have details visible in the shadows, and yet be badly under-exposed, if, as often happens, those details have not got any practical printing value.

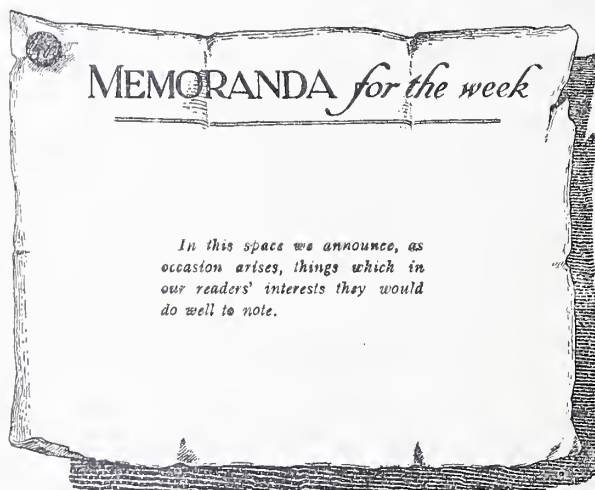
Showing Autochromes.

The method of showing Autochromes which was adopted at the opening night of the Regent Street Polytechnic was said by Mr. T. K. Grant to be the best he had ever witnessed. And on this point

Mr. Grant may be admitted to be a good judge. A large translucent screen fixed in a substantial gilt frame was employed. The Autochromes were projected on to this screen from behind by a powerful electric light, and, great attention having been paid to the darkening of the hall, the effect was most striking.

Copyright.

A question that was put to us recently by a reader whose copyright had been infringed on the Continent served to remind us that it might not be generally known that registration at Stationers' Hall not only secures protection throughout the British Empire, but in a great part of Europe and in certain other parts of the world as well. In short, in every country which subscribed to the Berne Convention. This includes France, Germany, Belgium, Italy, Switzerland, Spain, and Norway, so that the protection is fairly extensive. It will be noticed that the United States is not included in this list; while in Holland, as is well known, there is no copyright at all. In like manner photographs



which are copyrighted in accordance with the laws of any of the above mentioned countries, which are signatories of the Berne Convention, are protected in this country without any registration over here.

Reasons for Rejection.

The proposition which Mr. Sutcliffe makes in the "Yorkshire Post" last week is one about which much might be said on both sides. It is that when pictures are rejected from an exhibition the authorities should give the would-be exhibitor their reasons for the rejection. As he justly points out, it is fair to assume that it is not accepted because its faults outweigh its good qualities, and it is just these faults to which the exhibitor is blind. Could they not be pointed out to him? Mr. Sutcliffe's proposal is that one of the selecting committee should record in shorthand the observations made by his colleagues when the print is discussed, and that the record should be stuck on the back of the picture when it is returned. Having been present at a good many selections, we suspect that many of the exhibitors would receive a very nasty jar when they deciphered the shorthand slip; while others, who simply found such an inscription as this, "*Chorus of judges.—'OUT!'*" might not be much wiser as to the defects of their pictures.

Candid Criticism.

It is doubtless this desire to have their faults frankly pointed out to them by someone who has not the kindly partiality of a friend which leads to the sending of so many prints to us for criticism. As our readers know, any photograph sent to the office of *Photography and Focus* accompanied by a stamped addressed envelope and the coupon cut out of the

current issue will be criticised by the staff without charge—an advantage of which a large number of readers avail themselves.

Bacteria, for long I have connected in my mind,
With ailments and diseases which so oft assail mankind,
And so I haven't troubled much, relying on the skill
Of doctors and physicians, these sporangial foes to kill.

But now I'm filled with vague unrest, for some scare-monger states,
These microbes eat emulsions off our photographic plates;
'Twould be appalling if I "took" a family group, to find
Some of the members vanished, and the others left behind.

My subjects, architectural, o'er which I take such pains,
May, on development, reveal but ruined, wrecked remains,
A Gothic arch or column may succumb to their attack;
Where naves and chancels ought to be, may print out blobs of black.

Upon my landscapes, they might take small holdings too, I fear,
And brooks and trees and winding paths may wholly disappear;

While as for genre studies, I am living now in dread,
In case some patient model should completely lose his head.

My fears may be quite groundless, for these germs I do not know,
Nor under what conditions these small organisms grow,
Yet, as I feel unnerved, I think photography must wait
Until some cute inventor makes a photophylactic plate.

THE WEEK'S MEETINGS.

MONDAY, OCTOBER 26TH.

Bedford C.C. Trade Demonstration. The Lens.
Oxford C.C. "Lantern Slide Making." Mr. Robinson.
Bradford P.S. "Attempts to get off the Beaten Track." A. Houghton.
Bowes Park & D.P.S. Beginners' Class Technical Demonstration.

TUESDAY, OCTOBER 27TH.

Wellington C.C. Members' Slides.
Great Western Railway Literary Society. "Enlarging." W. J. Appleby.
Otley & District C. & A.S. "Enlarging Demonstration." J. W. Stancliffe.
Govan C.C. Club Meeting.
Heaton & D.C.C. Exhibition of Prints.
Halifax C.C. "An East Coast Ramble." W. H. Atkinson.
Nelson P.S. Print Evening.
St. Helens C.C. "Colour Photography." J. Critchley.
Kenning Park C.S.C. "Cycle, Camp, and Camera." R. Gracie.
Birmingham P.S. "Some Picturesque Midland and Cotswold Villages." W. A. Clark.
Hackney P.S. "Westminster Abbey." A. H. Hester.
Glasgow Southern P.A. "Art." J. Peat Miller.
Leeds P.S. "The Fringe of the Austrian Alps." C. B. Howdill.

WEDNESDAY, OCTOBER 28TH.

South Suburban P.S. "Yesterday and To-day in Photography." E. G. Price.
Wolverhampton P.S. "Miscellanea." Fred R. Turton.
Edinburgh P.S. "Development." T. Drummond Shiels.
North Middlesex P.S. "An 'Autochrome' Tour, Torquay and District." A. J. Woolway.
G.E.R. Mechanics' Institution. Prize Slides.
Leeds C.C. "How to Make a Bromide Enlargement with an Ordinary Lantern." F. Crossley.
Wimbledon Park P.S. "Defects in Negative and Print." W. J. Randall.
Coventry P.C. "The Italian Riviera." B. B. Dickinson.
Crowdon C.C. "Toning Bromide Prints." H. W. Bennett.
Bristol P.C. "Uses for Spoilt Materials." T. C. Pearse.
Everton C.C. "Lancashire and Cheshire." W. Tansley.

THURSDAY, OCTOBER 29TH.

Che'sea & D.P.S. "Ozobrome." T. Manly.
Rugby P.S. "How to Make and Manipulate an Enlarger." G. B. Morgan.
Rodley F.C. and B.P.S. "Large Pictures from Small Negatives." H. Crossley.
L. & P.P.A. "The Eighteenth Century in London." A. H. Blake.
Handsworth P.S. "The Naturalist and his Camera." Herbert Thompson.
Richmond C.C. Paper. F. P. Cembrano.
Liverpool A.P.A. "By Battlement, Wall, and Tower." James Shaw.
Blakburn & D.C.C. Whist Drive and Dance.
Ilford P.S. "The Camera at Home." E. T. Holding.
Rochdale A.P.S. Opening of Annual Exhibition.
Leigh P.S. "The Evolution of an Amateur Photographer." Willis Brunt.
Armley and Wortley P.S. "A Trip in the Mediterranean by two Ladies." Mrs. Brierley.
Hull P.S. "Enlarged Negative Making." J. T. Dyson.
Melbourne C.C. "The Choice and Use of Apparatus." Charles A. Gore.

FRIDAY, OCTOBER 30TH.

Colne C.C. "Control." T. Lee Syms.
Birkenhead P.A. "Oil Printing." C. F. Inston.

SATURDAY, OCTOBER 31ST.

Bolton A.P.S. "Simple Photographic Picture Framing." F. Greenwood.
Huddersfield N. & P.S. "Local Scenery." Dr. W. O. Head.

MONDAY, NOVEMBER 2ND.

Cleveland & C.C. "Wellington Specialties." H. Wade.
Ratley F.C. & B.P.S. "Figure Studies." W. Cohen.
Bowes Park & D.P.S. "Ozobrome." Thomas Manly.
Bradford P.S. "Thornton-Pickard Slides and Apparatus." R. Hesketh.
Stafford P.S. "Enlarged Negatives on Paper." Herbert A. E. Hay.
South London P.S. "The Right Way in Photography." Burroughs, Wellcome, and Co.
Bradford Grammar School P.S. "Plate Making." Hubert Henry.
Walthamstow P.S. "The Oil Process." W. H. Gilbert.

Societies will have their meetings announced here if the syllabus is sent to us at the beginning of the Session, or from time to time.

Lens Calculations Simplified.

A Question and a Reply.

"I have an anastigmat lens in my quarter-plate camera, with a focus of $4\frac{1}{2}$ inches. I am desirous of making a daylight enlarger. Will you please tell me what the distance should be (for whole-plate enlargements) between the lens and enlarging paper, and between negative and lens?"—IGNORAMUS.

THE question quoted above is one of a type which is often being put to us, so that any detailed description of the way in which the photographer can make the calculations for himself should be useful to many beside "Ignoramus." It should be pointed out that the dimensions which are obtained by following the instructions given below, although strictly accurate in themselves, are not applicable in practical work without being confirmed by trial, by which the final adjustments must be made if the result is to be satisfactory.

The distances are based on the focal length of the lens, and even when this is engraved on the mount by the maker it is not always given with such accuracy as is required if the position of the lens is to be settled by calculation only. A 7in. lens may have a focus of $6\frac{1}{2}$ in. or of $7\frac{1}{4}$ in., for example. Then again, although calculation may tell us a lens is to be 5in. from the negative, calculation does not tell us the particular part of the lens from which that 5in. is to be measured. The diaphragm is generally taken as the measuring point, and in working out the F number of stops this is quite near enough. A quarter of an inch more or less in a focal length of eight inches does not alter the F value so as to affect exposures appreciably, but it would make all the difference between a sharp and a fuzzy picture in focussing. For this reason then, although calculation will give us the approximate dimensions for an enlarging apparatus, or for anything of that kind, we must settle the position of the different parts finally by actual focussing. The commonest of these lens problems is the one set by our querist above.

To ascertain the dimensions of an enlarger two things must be known—the focus of the lens to be used and the ratio of the enlargement. The ratio means the proportion which any part in the enlargement bears to the same part in the original. It does not matter in the least what part we select. In the present case it looks (he is not quite clear) as if he were going to enlarge from quarter-plate to whole-plate. We can take the longest dimensions of the plate as the basis for finding the ratio. A whole-plate is $8\frac{1}{2}$ in. long, and a quarter-plate $4\frac{1}{4}$, so that the whole-plate is two times as long as the quarter. The ratio is therefore 2. The focus, he tells us, is $4\frac{1}{2}$. The following is the rule:

To find the distance between the lens and the bromide paper in enlarging, add one to the ratio and multiply the result by the focus of the lens.

In this case, then, adding 1 to 2 (the ratio), we get 3. Multiplying 3 by $4\frac{1}{2}$ (the focus), we get $14\frac{1}{2}$, so that the bromide paper must be $14\frac{1}{2}$ in. from that part of the lens from which the measurement has to be made. As already pointed out, the particular part of the lens cannot be definitely stated, so that the $14\frac{1}{2}$ is only approximate.

To find the distance between the lens and the negative in enlarging, add one to the ratio, divide the result by the ratio, and then multiply the result by the focus of the lens.

Applying this rule to the example selected, we add 1 to 2 as before, getting 3, which 3 we divide by 2 (the ratio), getting $1\frac{1}{2}$. Multiplying $1\frac{1}{2}$ by $4\frac{1}{2}$ (the focus), we get $7\frac{1}{2}$ in. So the distance between the negative and the lens will be, approximately, $7\frac{1}{2}$ in.

If the enquiry had merely asked for the distance overall between the negative and the bromide paper, we could get it by adding together the two results obtained as above, or we could obtain it by a single calculation direct, employing the following rule:

To find the distance between the original negative and its enlargement, divide one by the ratio, add thereto the ratio, add two, and multiply the whole by the focus of the lens.

Still keeping to the example given at the top of this page, we divide 1 by 2 (the ratio), getting $\frac{1}{2}$. Adding 2 (the ratio) to this we get $2\frac{1}{2}$; adding 2 to this we get $4\frac{1}{2}$. Multiplying $4\frac{1}{2}$ by $4\frac{1}{2}$ (the focus) we get $21\frac{1}{4}$. So that the negative would be $21\frac{1}{4}$ in. from the bromide paper. This confirms the previous calculations, which gave us $14\frac{1}{2}$ and $7\frac{1}{2}$, since $14\frac{1}{2}$ and $7\frac{1}{2}$ added together come to $21\frac{1}{4}$. This distance also is only approximate, for reasons into which there is no need to go.

If the distances of the lens from the negative and of the lens from the enlargement are known, we can ascertain the degree of enlargement without knowing any other factor whatever, since the dimension of any part in the one bears the same proportion to its dimension in the other, as the distance from the lens in one case does to the distance in the other. We saw above that when "Ignoramus" had made his enlarger, the bromide paper would be $14\frac{1}{2}$ in. from the lens and the negative would be $7\frac{1}{2}$ in. from the lens. Now $14\frac{1}{2}$ is just twice $7\frac{1}{2}$, so we know that any particular dimension on the original negative will be just twice as long in the enlargement. In other words, we can calculate the ratio from these two distances. The rule is—

To find the ratio divide the distance of the bromide paper from the lens by the distance of the negative from the lens.

There is one other calculation which may be given here, and that is to find the focus of the lens from the two distances in the enlarger. If we construct an enlarger, and having found by trial the positions of the negative, lens, and bromide paper respectively, we can measure their distances apart, and calculate, by means of the following rule, the focus of the lens.

To find the focus of the lens add one to the ratio and divide by the result, the distance of the bromide paper from the lens. Or, add one to the ratio and divide by the result, the ratio multiplied by the distance of the negative from the lens.

To take the first method first. In the case given above, we add 1 to 2 (the ratio) and divide by the 3 so obtained, the distance of the bromide paper from the lens. This we found (above) to be $14\frac{1}{2}$ in. Dividing $14\frac{1}{2}$ by 3 we get $4\frac{3}{4}$, so that we learn from this that "Ignoramus's" lens was of $4\frac{3}{4}$ in. focus, which we know to be the case. Or, if we like to adopt the second method in the rule, we add 1 to 2 (the ratio) and divide by the 3 so obtained the 2 (the ratio) multiplied by $7\frac{1}{2}$ (the distance of the negative from the lens). Twice $7\frac{1}{2}$ is $14\frac{1}{2}$, and $14\frac{1}{2}$ divided by 3 is $4\frac{3}{4}$. So we get the same result as before.

There are several other calculations of a similar character which the amateur photographer can perform very easily; but these are those which are most often required. We have purposely avoided the use of such terms as "product," "quotient," etc., for the sake of those readers whose school-days are but a hazy memory.



SUNSHINE AND KISSES.

BY E. T. HOLDING.

The original of this picture is No. 266 at the Exhibition of the Royal Photographic Society.



A BEND OF THE RIVER.

The original of this picture is No. 102 at the Exhibition of the Royal Photographic Society.

BY C. F. INSTON.

Preparing Negatives for Postcards.

By Harry Kingsley.

Special to "Photography and Focus."

THE making of photographic postcards may be made to furnish a very useful contribution toward the expenses of one's hobby. When only one or two cards are wanted from each

negative, they may very well be made exactly as ordinary prints are made, without any previous preparation of the negative of any kind. But when a number are to be printed, especially if we do not wish the cards to be at all "amateurish" in appearance, it certainly pays to spend a little time on the negative beforehand.

Comparatively few subjects look well simply printed on the postcard with the picture going right up and over its edges. Some sort of margin is always an improvement. If the picture on the negative requires almost the whole card to show it, a dark border of a very narrow kind looks well; but if there is to be a margin more than an eighth of an inch wide, then a dark one would look too heavy, and it is better to mask the negative so that the border prints white.

The case of a narrow dark border may be taken first. The negative for this purpose must either be on a celluloid film or else a glass plate that is at least $5\frac{1}{2}$ in. by $3\frac{1}{2}$ in. (a half-plate is better). Half-plate printing frames are to be preferred to postcard size for this purpose, as there is then no fear of the shadow of the frame being thrown on the card while printing. If the negative is on a celluloid film the borders of the picture must be very carefully marked on the film in pencil, and then, putting the film on a sheet of glass and using a sharp pointed knife and another sheet of glass as a guide, the negative is trimmed to that size, exactly as a print would be trimmed. As the celluloid is not easily cut, it is well to practise first on a spoilt negative, and to take particular care that the guide is held firmly down, and that the knife is very sharp. A clean piece of half-plate glass is then taken, and the negative is fastened down in the centre of it with a touch or two of seccotine. The seccotine should be applied only to those parts which

are deep shadows in the picture, and then it will be found not to show in the printing, if it is only sparingly used. The glass with the film negative on it is put away under gentle pressure for the seccotine to harden, and is then ready to receive the guides, described later.

If the postcard is to be printed from a half-plate negative on glass, all that has to be done is to mark in pencil on the film side of the negative the boundaries of the picture, and to cut through the film to the glass with a sharp knife. The point of the knife is then used, very carefully, to remove a strip of the film extending outwards from the ruled line for a little more than the eighth of an inch, the glass being carefully cleaned from all traces of the gelatine. If the negative is on a postcard size plate it is cleaned right up to its edges in the same way.

If it is smaller than this it had better have a white border.

The next thing is to provide the half-plate glass with guides, so that the postcard can be laid down in the correct place in a moment, with the certainty that the picture, with its dark border, will be nicely centred. Two strips of thin card $6\frac{1}{2}$ in. by $\frac{1}{2}$ in. are required, and these are stuck with seccotine to the glass, so that they are slightly more than $3\frac{1}{2}$ in. apart, with the negative in the proper position between them. Two other pieces $3\frac{1}{2}$ in. by $\frac{1}{2}$ in. are fastened at the ends in the same way. The best effect is obtained by having the margin a little narrower above the picture than below. When the negative has been prepared in this way a large number of prints



MEDITATION.

Awarded the First Prize in the Beginners' Competition, July.

By S. M. PIKE.

can be made from it exactly alike with no trouble at all for adjusting the mask or the card.

A white border may be provided in much the same way. If the negative is smaller than half-plate a clean piece of glass is put in the frame, and a thin card half-plate size has an opening cut in the centre of it the exact size of the negative to be employed. The negative is carefully fitted into this. With four strips of thin black paper of the requisite width the negative and card are masked, so that only that part of the picture which is wanted can be seen, the black paper being fastened to the card at each end with a touch of seccotine. Thin strips of card are then attached as before on the top of the black paper to serve as guides, and the negative is ready for printing. If the cards used are thick they may hold back the back of the printing frame to such an extent as to prevent it from applying sufficient pressure to keep the postcard in contact with the negative. This should be looked to, and, if necessary, an extra pad of paper or, better still, of carpet felt inserted in the frame. But it ought not to be necessary.

Every amateur maker of postcards at some time or another must have wished to be able to print the titles on his cards as neatly as is often seen on the commercial cards. It is not very difficult to do so, but takes a little trouble, and calls for the making of a good black and white negative, which requires a little practice. The titles must either be very neatly printed on white card or may be cut out of printed matter and stuck on a card. As a rule a local guide book will be found to contain the names of the subjects, and these names are simply cut out with a pair of sharp scissors and mounted on a card. Six or eight names can usually be arranged on the card so that all can be photographed together on a quarter-plate. The plate used for this purpose should be a "photomechanical" one (backed). The lettering should be most carefully focussed, and the exposure a full one in a good light. A trial plate exposed in strips is the best way of finding out what the correct exposure should be. With the plates will be found a formula for a developer, and this must be used in preference to the ordinary developer, as it is designed

to give great density and clear shadows. The negative must be fully developed, so as to get the white ground of the lettering as opaque as possible, and if sufficient density is not obtained it may be intensified with mercury. The negative is then cut up into strips, each containing a title.

To use one of these strips an opening is cut in the card which surrounds the postcard negative, and the negative of the title is inserted, an opening being also cut in the mask above, so that it may print through. If the title negative is not very dense the borders of this opening may show on the print, but this can usually be prevented by fastening a piece of black paper on the outside of the glass, so that the title does not print while the postcard is being printed. This black paper is then pulled away for just long enough for the lettering to print. The method takes a little trouble, but it gives a much neater result than any other.

The other methods of lettering are well known. Rubber type is often used for the purpose. If a blank space is required on the picture on which the type may be impressed it can be provided by painting very carefully on the dry film with a solution composed of equal parts of a five per cent. solution of copper sulphate and potassium bromide. Wherever this touches it whitens the negative right through to the glass. The negative is then washed under the tap for a minute or two and placed in clean hypo. All image on the part whitened will dissolve right away in this, and the negative is then washed and dried. When dry the type may be impressed on the place provided. Or a title may be painted thereon with Indian ink and a fine brush. If the title is written in violet "graph" ink, or even in ordinary copying ink, on a piece of smooth paper, and is allowed to dry, this paper may be placed on the damp negative, after the hypo and washing and after it has become surface dry, and rubbed into contact. The title will then be found to set off backwards, and, although it is not likely to have contrast enough to print as it is, it will be found useful as a guide for the brushwork.

A Demonstration of the Bromoil Process.

THE Hull Photographic Society on the 15th inst. witnessed a demonstration of "bromoil" by Mr. A. E. King. The lecturer described the process as a combination of bromide and of oil printing, oil prints being thus made either on bromide contact prints or enlargements.

The bromoil process requires a thoroughly well developed print, but not a dense black one. It should be as good as can be made. When thoroughly fixed, washed, and dried, it is bleached as if for sulphide toning. For a half-plate print Mr. King recommended—

Ozobrome pigmenting solution	...	2 drachms
Potash alum (ten per cent. solution)	...	2 drachms
Citric acid (ten per cent. solution)	...	$\frac{1}{2}$ drachm
Water to make	...	$1\frac{1}{4}$ ounces

The print must be evenly flooded with

this solution from the very commencement, and the image then disappears to all but the faintest sign, when the print is washed in clean water until the yellow stain has disappeared. It is then passed through a bath (for a half-plate) composed of nineteen drachms of water to which has been added one drachm of pure sulphuric acid. In this it is left for about five minutes, or in hot weather until a distinct relief is visible in the gelatine, which may be for a shorter time. The print is again washed for two or three minutes, and is then immersed in the hypo bath composed of

Hypo	...	2 ounces
Sodium sulphite	...	$\frac{1}{2}$ ounce
Water	...	20 ounces

For inking up the print is laid face upwards on a pad of blotting paper, and the superfluous water is removed. An old clean cambric handkerchief can be used, giving it a gentle

pressure to take off the visible moisture. If any is left on the surface that part will refuse to take the ink, leaving a white patch which must have local treatment with a fine brush. Three brushes are sufficient, Sinclair's No. 8 and No. 1, and a smaller one for fine work.

Mr. King recommended the "hopping" method as the best in his experience. He preferred to find the horizon line first. A very small portion of the pigment is spread out on an old negative as a palette, and thinned out with the palette knife. The brushes should be cleaned frequently, to prevent them from becoming clogged up, with a little petrol and a rag.

The principal thing to remember is that one must in the first place aim at getting a good print or enlargement. Much can be done by over-exposing slightly and then well developing. The results are then finer.



A CRITICAL CAUSERIE.

By "The Bandit"

Concerning some Photographs by Beginners.

"Critics?—appalled I venture on the name,
Those cut-throat bandits in the path of fame."—BURNS.

MANY a poor joke has been cracked at the expense of the extremists who boast that a well composed picture looks as good if hung wrong way up as it does if in its proper position. The assertion is one which contains a big enough grain of truth to make it over-plausible to would-be "art-y" folks, and absolutely ridiculous to philistines. If you take a well-designed wallpaper and put it on your wall upside down, not much harm is done. The effect is broadly speaking, as good as ever it was. Similarly, with a picture whose design is well proportioned, the design, as such, will be as well proportioned one way up as the other. But the story of the picture, the story which its design helps to tell, will, of course, be lost unless the picture is viewed right way up.

In pictorial photography we have heard a lot about the value of good composition. What is this mysterious thing, good composition? Well, it may loosely be defined as the arranging of masses and lines in such a way that they give pleasure to the eye. But why should a certain design or pattern of lines or masses give pleasure, while a trifling rearrangement of the same lines and masses gives little or none? This I cannot explain; and I hope I am not so conceited as to set myself up as capable of explaining it. It is a subtlety which is beyond me. But I think you will agree with me that it is a subtlety which exists.

Look at the picture "Ronny." It is an interesting example of a composition which is pleasing, while a rearrangement of the same subject might have been clumsy. It is a portrait; and you will observe that it

exhibits certain long and suave curves which, with hardly a break, lead up to the obviously principal object—the head and face. The head is by no means central. It is near a corner of the print; and evidently with intention.

Now suppose the photographer had turned this little boy so that his pose was precisely the same but he faced the camera; suppose his feet had stuck straight out towards the camera and his head had been in the middle of the plate. Wouldn't he have had a bunched-up look? Wouldn't the com-

position have been lumpy and ugly compared with this? It would, and quite apart from the fact that distortion might have occurred owing to exaggeration in the size of the feet. Even supposing a correct perspective had been maintained with the aid of a long-focus lens, the composition would have been bad—while this composition, as it stands, is good, though the lines and masses used to make it are the very same ones which would have been used to make the bad composition.

As I said before, I cannot presume to explain to you the psychological reason (I suppose it is psychology) why this composition should satisfy the critical human brain and the other dissatisfy it. But there is the fact, and you and I have got to realise it, and build our pictures with a recollection of it.

Curves and masses are excellent things, in other words; but only if arranged to the best effect and in suitable quantities. A mere outpouring of as many curves and masses as can be squashed on to a plate is no good. You will more likely have too many than too few, and half the merit in

"Ronny" is that it is judiciously economical of its lines; the needless stripes on the jersey are the sole fault. Look at "Spring in the Park"—a subject full of promising lines, the most interesting of which are the respective curves of the path and of the lake. Both are artificial curves. No matter. They could have been utilised pictorially. But unfortunately there is no seemingly economy of lines in this picture. It is what modern critics call "busy." All over it, something is happening. Trees are shooting skyward, in competition with



Spring in the Park.

By H. Woodard.



Ronny.

a spire and a monument. People are hurrying to and fro. And altogether the eye, instead of travelling along some placid curve till it finds a resting point at some final object of supreme interest, hops from one perch to another and settles nowhere. Delete the trees and the people, and one may say that the path and lake, with the distant spire, make a very fair composition. Of course, the evident retort is that neither trees nor people could be deleted. Well, all I can say in that case is, either the photographer should not have attempted to take the picture at all (unless, of course, it is purely topographical), or else he should (1) have chosen some other standpoint where the composition was more harmonious, and (2) have waited till the figures happened fortuitously to arrange themselves in a pleasingly balanced way.

"The Bonnie, Bonnie Banks of Loch Lomond" is a specimen of a picture in which the photographer has quite consciously aimed at "composition." The curve of the beach and the line of the distant shore are pleasing—as are most natural curves. But there is something wrong, and my diagnosis of the fault is lack of balance. We have masses, but they are all on one side, and have nothing on the other to compensate them. One feels vaguely that the merest dot of a sail on the water of the lake would have pulled the balance together; better still, perhaps, a few heavyish clouds in the right hand top corner.

"But," says someone, "in 'Ronny' the masses—the head and body—are all on one side of the picture, and there is nothing but a blank space in the opposite corner. Why is 'Ronny' well composed, and 'Loch Lomond' badly composed?" To which my reply must be the blunt one that I simply don't know. I may make the following tentative guesses, however: First, the lines of "Ronny" begin diagonally opposite his head; that is, his feet are

at the corner remote from his face; and the feet themselves make a very strong keynote of secondary interest balancing his face. Now in "Loch Lomond" the lines, at least those parts of them which are clearly visible, are all on the same



By the Bonnie, Bonnie Banks of Loch Lomond.

side of the picture as the principal mass, and do not lead right across the frame as do "Ronny's" legs. Secondly, the very blankness of the background in the top right hand corner of "Ronny" gives the picture strength, whereas the blankness in the right hand top and bottom corners of "Loch Lomond" give it weakness. The latter, being natural, ought to contain some-



A Restful Spot.

By T. Aldridge.

thing—clouds or waves or reflections, or a boat; the former, being an artificial background, is in itself part of the picture; its very emptiness is in keeping with the picture's simplicity and economy of means.

I advance these as pure theories,

merely to show that, if we can only find it, there is a reason for this mysterious quality which we call good composition.

Lastly, let us look at a picture called "A Restful Spot." In this we see that the composition is made up of a number of vertical lines, repeated over and over again, and thrown into prominence partly by the expanse of water behind them and partly by the curving cross-line of the water's edge. The whole effect is decidedly "restful," as the author himself has perceived. The trick of repetition of lines often produces this result. The line of a nearly horizontal branch near the top left hand corner strikes a jarring note, showing how dangerous it is to interrupt repetition; but a

more jarring note still is struck by the two bicycles, which are absolutely foreign to the scene's charm. True, the cyclists may have been resting, their machines may at first sight be supposed in some measure to bear out the title's meaning. But this is an error. For mark this, the restfulness, as restfulness, is not in the least dependent on the cycles; it is dependent on the trees, the lake, the shade, and so forth. The cyclists did not dub this "A Restful Spot" because they saw two bicycles under the trees, but because there were trees for the bicycles to stand under.

Now these cycles illustrate inharmonious composition just as surely as do the absence of clouds in "Loch Lomond" and the scattered busyness of "Spring in the Park." So one perceives that composition is a complex thing, full of pitfalls—pitfalls not half of which I have yet had time to illustrate in my Causeries. Photographic beginners must learn to cultivate a respect for composition, to take it seriously, and not to laugh it off as a mere fad of the long-haired fraternity. However simple the aim of your snapshot, be sure composition comes into it somehow, and may cause success or failure, quite apart from technique.

The British Awards at the Franco-British Exhibition.

THE following list gives the awards made in Class 12, Group 3, of the Franco-British Exhibition. This class is for photographic materials, appliances, processes, and products, and includes British exhibits only; the French award list is not yet issued.

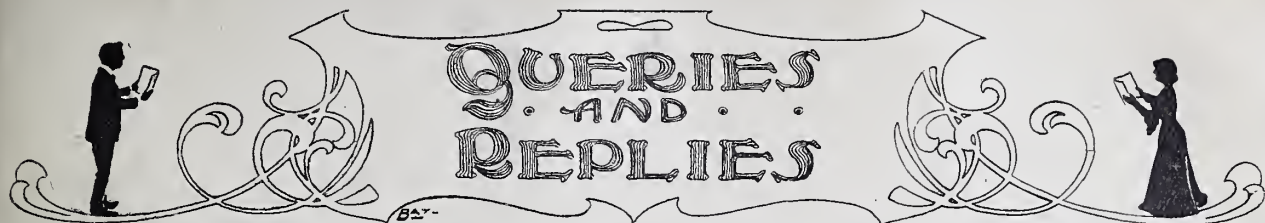
DIPLOMA FOR GRAND PRIZE.—British Pictorial Photography, Oxford University Press, Ilford, Ltd., Burroughs, Wellcome, and Co., J. H. Dallmeyer, Ltd., Valentine and Sons (1907), Ltd., "Daily Mirror," Public Works Department (Sydney), South Australian Government (Australia), New Zealand Government (New Zealand), Lafayette, Ltd., W. M. McClean, Prof. W. M. Hartley, Edgar Senior, Chas.

P. Butler, Cambridge University, Major-General Waterhouse, W. W. Watts, Stoneyhurst College Observatory, Chapman Jones, W. S. Lockyer, J. E. Stead, National Physical Laboratory, Kenneth J. Tarrant, Vaughan Cornish, Mrs. Maunders, Solar Physics Observatory, and G. J. Beilby.

DIPLOMA FOR GOLD MEDAL.—E. W. Savory, Ltd., Greenham and Evans, Schmidt Studios, Mr. Beattie, Major J. G. Guggisberg, R.E., C.M.G., Ellen Macnaughten, P. Poulsen, Terence McGann, Le Faivre, and Captain Lawrence.

DIPLOMA FOR SILVER MEDAL.—Kinora, Ltd., E. S. Brown.

DIPLOMA FOR BRONZE MEDAL.—John Gray, G. Rehaut, and J. G. Gentil.



REGULATIONS.—(1) Envelopes must be marked "Query," and the "Enquiry Coupon" found elsewhere must be enclosed. (2) The full name and address in addition to a *nom-de-plume* must be given. (3) Only one question on one subject is allowed in each letter. (4) Prints may be sent for criticism, but a separate coupon must be sent with each print, and a stamped addressed envelope (not loose stamps) for their return. Queries are dealt with in strict rotation in the order received. Only "Urgent Apparatus" queries will be dealt with by post, for which purpose a stamped envelope must be enclosed.

R. HEARN (Dartmouth Park).—There is not any book on the subject.

R.R.W. (Rhyl).—We cannot give the formula. We believe it to be a trade preparation.

BUCKLAND (Hampstead).—The "pen-nib" trimmer is known as such. Any dealer will supply it. We notice Messrs. Butcher list it, price 1s. complete, (twenty nibs and a holder).

PLANTO (Uckfield).—We do not think that any P.O.P. print has such chances of permanence as has a bromide print; but there is no reason why it should not last if the processes are properly carried out.

SLIDE (Sunderland).—The material of which the hinge is composed is unsuitable, and the slide should be returned to its makers with a print to show how it affects a plate, and a request to have it changed.

WYELANDS (Chepstow).—Yes. A little more development would have improved it considerably. As it is, it is almost, if not quite, dense enough for enlarging, but would bear a little more development for contact printing.

AGFA (Bristol).—Both are good. We do not recommend one in preference to another. We do not know how the dealer learnt their composition; we do not know it. We suspect he wanted to sell the one. See rule 3 above.

W. J. NORMAN (Hornsey).—The lenses are not sold in this country except attached to cameras, and we have no pricelist. Even if we had we could hardly tell you its price unless we knew the size, which you have omitted to give.

PUZZLED (Birmingham).—The spots are clearly due to some chemical dust, which has fallen on the prints while they were wet. Your best way of preventing them would be to have the workroom most thoroughly cleaned out all over.

B.P. (Bexhill).—Certainly it will. We do not quite know what you mean by "American stops." It is graduated in F numbers. If the "U.S."—"Universal System," not "United States"—you must learn what F numbers correspond to those you have.

W. FENTON (Helsh).—The solution of sulphide was probably much too strong. If you keep it down to two or three grains per ounce, and take particular care to have all the solutions and washing waters at the same temperature you should have no trouble.

A. WOODWARD (London, N.).—Such solutions made with tap water keep very badly. The deposit is platinum, and to that extent the solution is weakened. You might try it to see if it is completely spoiled. There still may be enough left in the solution to act. It is not otherwise spoiled than by being weaker.

J.T. (Altrincham).—Not having seen the stains we cannot suggest their cause. Under-exposure and over-development are responsible for the "very dirty appearance" generally. If the dry print is rubbed lightly with a piece of cotton wool just moistened with methylated spirit, most, if not all, can be removed.

E. DARYLL HINE (London, S.W.).—We should say that the enlargement was not good enough originally; it must have been very weak if it is no better than this after intensifying. The method will improve a print that is not quite perfect, but it will not turn a poor one into a good one, and we are afraid that is what you have been trying to do.

J. ARTHUR LOMAX (Cardiff).—In our opinion there is no appreciable advantage in using panchromatic plates and colour screens adjusted to them for landscapes, seascapes, and figure work, that is not equally well obtained with the ordinary form of orthochromatic plate and screen. For special work the panchromatic plate has its advantages, of course.

FORSTA (Denmark Hill).—We cannot give "hints" in this column, which is reserved for replies to specific questions. You can do what you want with two ordinary lamps, placed one each side of the original and fairly near it, but shielded so that they do not shine into the lens. Or magnesium ribbon can be used in the same way, but we prefer the lamps. The distances you can work out on the lines given in our article this week.

RETOUCHED (Blackburn).—If the conditions require the work to be all your own except framing, we cannot see that the committee could have had any option but to disqualify prints from negatives that had been retouched by someone else. We quite agree with you on the point about exhibitors getting even their prints made by others; but what other competitors do has no bearing on the question whether or not your own prints comply with the exhibition rules.

IGNORAMUS (Streatham Park).—You are answered at length elsewhere.

A. MAYER (Leipzig).—Your enquiry comes too late for our reply to be of any service.

DR. CROOK (Bath).—Raines and Co., St. Mary's Road, Ealing, would do the work. It is a firm we can thoroughly recommend.

E. COATLIDGE (Longton).—We do not see that the photographs could be of any service to us under the circumstances. Many thanks for the offer.

P.T. (Soho).—Your question is of too general a character to be dealt with in this column. You will find it answered very fully in *Photography*, March 10th, 1908, page 200.

MANGANES.—You do not send your address. We know of no classes except those of which particulars have been given in our columns during the past few weeks.

SPIDER (Plymouth).—The distances will be approximately 10½ inches negative to lens, 3½ inches lens to bromide paper. The final adjustments must be made by actual trial.

MAJOR (Exmouth).—Kodak or Ensign; the former is supplied by Kodak, Ltd., Clerkenwell Road, London, E.C., and the latter by Houghton's, Ltd., 88-89, High Holborn, London, E.C. Both are obtainable through dealers.

H. YEOMAN (Southall).—Certainly it is, provided the photograph is placed where the bromide paper goes and can be lit while there. If it is anywhere else and the plate is where the negative is put, it will not be in focus.

K. SEYMOUR (Barnsbury).—It is quite clear from your specimens that you are coating the paper very much too thickly. It should not be much more than a greyish tint before printing. We note your request and will see what can be done.

MARGKOLD (Crowborough).—A special machine is employed, and the negative film is passed through it in contact with a film coated with lantern slide emulsion, on which the image is printed. This second film is then developed like the first, and bears a positive image.

TEACHER (Birkenhead).—If the negative is perfectly sharp all you have to do is to print it by the single transfer carbon process, which will bring things the right way round again, or print it on bromide in an enlarging apparatus, turning it the reverse way round.

MARGUERITE (Dorking).—We are very glad to hear that you find the paper of so much service, and hope to continue to deserve your good opinion. We are afraid you were too sanguine over the advertisement. What can you expect in the way of apparatus at the money?

G. P. BAXTER (Hull).—The stains must be due to some defective manipulation on your part, either dirty fingers or dirty dishes, and the cause should be sought out and removed. We know of nothing else that could be done to prevent them. If you are using a reliable make the backs should be spotless.

A. E. BUTTON (Doncaster).—You would find it cheaper to get an enlarging lantern than to attempt to use your optical lantern, which only has a 3in. condenser. You could employ it to enlarge such portions of your negatives as the condenser would cover, if they could be inserted where the slides go, but nothing more. It would not be of any use for slide making from half-plate negatives.

WINTERDYNE (Birmingham).—Use slightly warmed water, and dissolve each chemical in the whole quantity of water, in the order in which you have set the ingredients down, taking care that each is quite dissolved before adding the next. You ought then to have no trouble. It is the metal that crystallises out. If there is only a little of it it might be allowed to settle and the clear liquid poured off for use; but by using the solution when it is at all muddy, there will be risk of spots on the negatives. The trouble with the illustrations is the large number of copies that has to be printed in a limited time.

OTTO (Junction Road).—The paragraph on page 484 last week should help you. The lenses may be used just as is most convenient to you at the moment, bearing in mind that it is well to use the longest focus you can for portrait work, that it may be necessary to use the complete lens for buildings to avoid the curving of straight lines near the edges of the plate, and that street scenes generally call for the complete lens on account of its greater rapidity. If you do not want to give a very short exposure for a street scene, or if on examination there is no perceptible distortion with a building, there is no reason why one combination of the lens should not be used in either case.

CLOCKONE (Oakham).—They are in no way detrimental either to its use or value. The particular glass employed cannot be obtained free from them.

JAM'S ANNAND (Child's Hill) asks if we know of a photographic club in that direction which he could join. Perhaps some local reader can furnish the information required.

W. E. HICKLING (Leicester).—The enquiry is one on which we are hardly qualified to express an opinion; the articles seem attractive enough, but so much depends on other things besides. Commercial ability plays the very largest part.

OPTICS (New Cross).—We should get B, quite apart from "name" or "reputation," as we should expect it to be altogether a better instrument. We cannot be more explicit in this column.



HOSE who take any notice at all of fashions in ladies' hats need hardly be told that the small and inexpensive pattern is as rare as were the British exhibitors at the 1908 Salon. The large hat—known as the "Merry Widow" pattern—is now "all the go." Photographers have every reason to welcome it, since it makes an admirable background when taking bust portraits. If the hat gets much larger—and fashion experts say it will—it may perhaps be made to serve for the whole figure. Photographers will then require no backgrounds at all.

A mistake beginners often make is that of taking a portrait bust against a brick or ivy-covered wall. Not infrequently the head is lost in a mass of confusing detail. With a "Merry Widow" hat upon the sitter's head such a blunder becomes almost impossible, as the brim of the hat is large enough to cover up the ugly background, and so to isolate the head in such a manner that the observer's attention is drawn to the face, and not to the background. If the ugly and unsuitable background shows itself in the spaces between the hat and the shoulder, it takes a very small piece of suitable material—say brown paper—to fill up the spaces behind the sitter before making the exposure.

I always had a fancy for very light backgrounds, and have frequently attempted to take a sitter sitting back to the window with lace curtains as a background, in order to secure the necessary whiteness and to render the face in shadow, but owing to light spreading I was never able, until this hat came into fashion, to get clear outlines, and the face always appeared fogged. With the "Merry Widow" hat, however, the work becomes easy, the dark brim of the hat showing up the face to perfection.

When the hat goes out of fashion I shall always retain one, as I look upon it as a very useful photographic accessory, far more artistic and useful than the orthodox palm, column, carved table or chair.

BACKGROUND.



The Chic Series of Christmas Card Mounts.

THE "Chic" series is the name given to the Christmas cards and calendars which are issued by Kodak, Ltd. A representative assortment of patterns which have been prepared for this season's trade is before us as we write. The tones and textures of the materials used in their production have been selected so as to include none but those on which photographs show to advantage, but within these limits there is a very wide range, and designs will be found in the series to suit all tastes and all pockets.

Both paste-on and slip-in mounts are included in the list, which is fully illustrated. One very attractive paste-on mount is composed simply of a thick white card, with the original dekle edges preserved. It is folded in half, and the inner half is provided with a plate mark. The outer half bears a neat inscription in colour, such as "Greeting," "To Greet You," etc. These mounts, which are numbered 220-224, can be obtained in several sizes at 1s. 6d. per dozen. Another most effective card is numbered 272-276. This has outer leaves of white marbled linen surface paper with a neat in-

scription. Within these are two leaves of stout substance and white colour—one with an opening into which a photograph can be slipped, the other, which faces it, with a suitable inscription. These particular mounts range in price from 3s. to 3s. 6d. per dozen. There are other designs in the "Chic" series which are almost equally effective; we

have merely picked out for notice two which caught our eye. Photographers who are thinking of sending their photographs away as Christmas cards this year will do well to take an early opportunity of seeing the "Chic" series, which can be done at any dealers, or at the Kodak Co.'s establishments.

Glossy Non-stress Celerio Paper.

CELERIO is the name given by the Birmingham Photographic Co., Ltd., to the gaslight paper made by it. "Celerio" has been reviewed by us in these columns already, and we have no doubt is very well-known to our readers as a gaslight paper of excellent quality. Latterly, the makers have been able to modify it in an important direction, by which they claim to have done away entirely with those "stress" marks which have often troubled the user of gaslight paper in the past.

We have received a sample of the new paper from the company, with a request that we should make exhaustive tests by rubbing, etc., with the view to produce stress marks, and we accordingly submitted the paper to a very careful examination. The developer we employed was the metol-

quinol formula given by the makers of the paper, and with a view to reveal the slightest trace of any stress marks that might manifest themselves, we employed as a subject a negative masked so as to give a broad white margin. Handling the paper far more roughly than would ever be the case in actual practice, we got prints every time which showed no sign of the defect. The treatment the paper got had it been, say, the old "Celerio" before the introduction of this modification, would certainly have ruined the prints, but they came through the ordeal quite unharmed. The makers point out that the "Non-stress" emulsion being specially hardened, the prints take a little longer for the developer to act, and that the user must not be misled by this into increasing the exposure, or the prints will be made flat.

Griffin Bromide Paper—Lingrain Surface.

THERE are many purposes for which the fine texture of a linen surface may be given to a photograph with advantage, and the simplest way of doing this that we know is by the use of the new grade of bromide paper introduced by Messrs. J. J. Griffin and Sons, Ltd., of Kingsway, London, W.C., and appropriately named by them "Lingrain."

It is too late in the day to devote any space to pointing out the excellences of the Griffin bromide papers in general. All that we need do here is to indicate wherein lie the particular advantages of the Lingrain grade. It must not be supposed that the grain of this is anything like that of canvas, or, indeed, that the grain is directly noticeable at all. It is no coarser than that of a fine cambric handkerchief, so that, no matter at what angle to the light the print is viewed, the

grain does not assert itself. All that it does is to soften the picture slightly, but not enough to cause any noticeable loss of detail. It is therefore quite suitable even for small contact prints, and we do not doubt that it will be even more largely used for these than for enlargements, since for the latter many workers prefer something decidedly rough. Those who like their enlargements to be full of fine detail, however, will find Lingrain to be very suitable.

The new paper is very easy to work, the formulæ for it being the same as those used for the other grades of Griffin bromide papers. The makers claim that Lingrain is quite free from surface markings, and we can confirm this by saying that in our trials we found no trace of them. A packet of twelve half-plate or six whole-plate pieces costs 1s.; twelve quarter-plate, nine 5×4, or eight 6×4½, selling at 6d.

The Argus Reflector Camera of W. Watson and Sons.

THE camera illustrated below comes from the factories of the well-known firm of W. Watson and Sons, Ltd., the makers of the famous Premier and Acme cameras, which, each in its own line, touched the high water mark of workmanship and material. The Argus is equally well constructed, and is a most attractive camera in every way.

As can be seen, it is a reflex instrument. The focal plane shutter, which forms part of the back of the camera, is adjusted by the two-fold method of altering the tension of the driving spring and the width of the slit. In this way exposures from one twelve hundredth of a second can be given, a little tablet on the side of the camera showing at once the actual exposure given by the tension and slit that are being employed. The whole of the adjustments of the shutter can be made from the outside, so that there is no need to open the back to get at

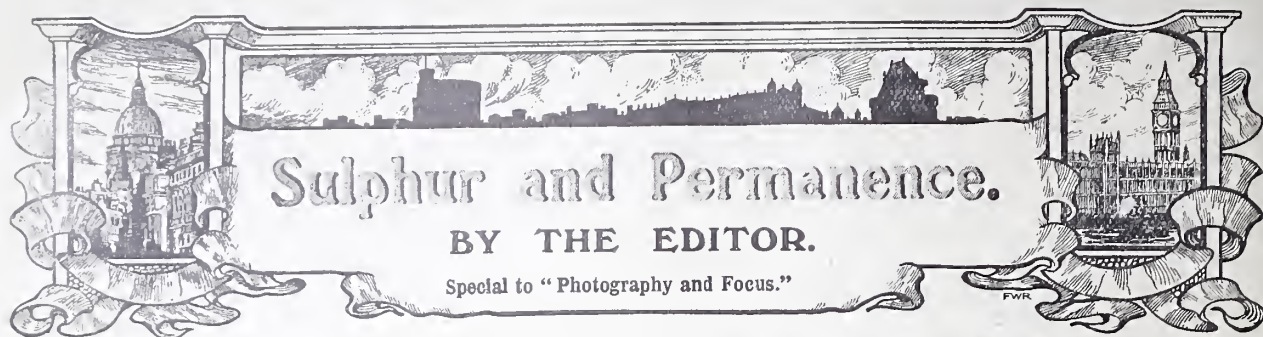


the slit. A feature of the shutter is the speed with which it can be set with the smaller widths of slit, little more than a single turn of the winder being required.

The quarter-plate square pattern was the camera sent to us for notice. In this size the maximum extension was 10½ in. and the minimum 6½ in. This size is constructed to work with a 6½ in. Series I. Holostigmat or similar lens, and will extend sufficiently to take the single combination of the lens. The size of the camera closed is 7½×6½×6, and its weight four pounds. The wood of which the body is made is described by the makers as "best selected Spanish mahogany, carefully seasoned by us for months, and guaranteed to withstand any climatic influence which it is possible for wood to do, each board carefully tongued and clamped where necessary." This, of course, is a matter which mere examination cannot confirm or contradict; but we have used Messrs. Watson's apparatus for the best part of twenty years, and have learnt to put the most implicit confidence in their material and workmanship, and have no doubt that the Argus is a worthy addition to the list. Certainly the finish of the camera was all that could be desired.

The focussing knob is on the left and the release on the right. The mirror is silvered on the surface, and does not require setting after each exposure; the result is that immediately after exposure the image can again be seen in the finder. The hood screens the ground-glass very efficiently, and is so arranged that the whole of the picture can be seen at one time. There is a ground-glass screen, provided with a hood, at the back of the camera, for use when a stand is being employed, and in the square pattern there is a revolving reversing back.

The price of the quarter-plate Argus camera, square pattern, with three best quality book-form slides, but no lens, is £12 10s. Other sizes, both with and without lenses, are quoted in the descriptive pamphlet, which will be sent on application to the makers at 313, High Holborn, London, W.C.



An explanation of the conditions which affect the permanence of silver prints, with a summary of the precautions to be taken by the amateur photographer to ensure that such prints shall be as lasting as possible.

AMATEUR photographers are apt to look upon the permanence of their prints as an important quality. In a year or two they may not care whether the prints they make to-day have faded or not; but at present they represent the high watermark of their photographic skill, and it is only natural that they wish that evidence of their ability to be lasting. How to make it so is, therefore, the perpetual problem.

The great enemy of the silver print is sulphur. By silver print, for the moment, is meant a print on P.O.P. (gelatino or collodio-chloride), bromide, gaslight, or plain salted paper. In all of these the finished image contains silver, if it does not consist wholly of that metal. In the case of a properly finished bromide or gaslight print, the image should be one of plain, finely-divided metallic silver. In the case of prints on salted paper or on printing-out papers, it should consist of metallic silver combined with more or less of metallic gold or platinum, or whatever metal has been applied in the toning process. Sulphur slowly attacks silver, and the fine state of division of the metal in a photograph makes it far more susceptible to the action of sulphur than a solid block of the silver would be.

The photographer may wonder whence the sulphur is to come that is going to cause his print to fade. There are two chief sources for it. One is the paper of the print itself, the other the atmosphere. Hypo contains sulphur, and however carefully the print may be fixed and washed, there may remain traces of salt containing sulphur in the film of the picture or in the fibre of the paper. Then, again, hypo is used in the manufacture of some papers and cards, and although the paper of the print itself is sure not to contain any, the paper or board on which the print is mounted, unless made for photographic purposes by a reliable firm, may contain hypo. Even the picture itself may contain sulphur, as we shall see subsequently.

Hypo, so long as it remains hypo, has probably very little effect on the permanence of the silver print. It should be thoroughly washed out of the print, as far as washing can remove it, of course; but it only becomes actively harmful when it has undergone decomposition. Acids decompose hypo almost at once, forming compounds which are most harmful to the print. It is for this reason that it is so important that the mountants used for photographs shall contain no acid. It is not that the acid itself is injurious; it may or may not be. But it tends to convert any hypo left in the print to an actively injurious salt. For the same reason, when

platinum toning solutions, which are generally acid in character, are used, it is important to wash the prints between toning and fixing, and to add a little bicarbonate of soda to the hypo, so as to neutralise any traces of acid there may be in the print, and so prevent this action from taking place.

The combined toning and fixing bath has a very bad reputation as far as the permanence of prints toned in it is concerned. Some prints toned in combined baths have remained unaltered for many years, showing that in some circumstances the combined bath may be quite harmless; but there is no doubt that in a great many cases prints toned in a combined toning and fixing bath have faded. This is due, beyond all doubt, to the sulphur introduced into the print in the combined bath. There is a very curious thing about some of the compounds of silver and sulphur in a gelatine film. The colour of the picture they produce so closely resembles the colour produced by gold toning properly carried out that the photographer may be misled into thinking that his toning bath is depositing gold on the print, when actually it is sulphurising it and sowing the seeds of speedy fading. Two prints may be toned in the same bath, and one may have a proper deposit of gold upon it, increasing its chances of permanence, the other may contain at the finish no gold at all, its rich colour being due simply to compounds of silver and sulphur.

It is important, therefore, when using a combined bath to take care that it is gold, and not sulphur, toning which is taking place with it. The only way of doing this is by noting how many prints are toned in the bath and how much gold was put into it, taking fresh solution before there is any chance of all the gold in the bath being exhausted. Two grains of gold should be allowed to each full size sheet of paper or, as a rough guide, one grain of gold to every sixpennyworth of P.O.P. There is another danger from the improper use of the combined bath. As the prints are taken out as soon as the right colour is obtained, it may happen, if the bath has not been properly made up, that they are toned before they are fully fixed. In such a case the prints ultimately will develop discolorations of a patchy, irregular character. These are avoided by keeping carefully to the maker's formulæ. But the combined bath is better avoided altogether by those who lay any stress on permanence.

It may seem strange that while so much is said about the injurious action of sulphur, it is nevertheless a fact

that bromide and gaslight prints are deliberately toned with sulphur, and the prints so toned enjoy a good reputation for permanence. A little explanation seems to be necessary. It is, briefly, this. The compound known as silver sulphide is that which is formed in these orthodox processes of sulphur toning, when they are properly carried out. Silver sulphide is a brown substance, the whole of the silver forming the picture is converted into silver sulphide, and the image accordingly is changed from black to sepia. This silver sulphide is an extremely permanent substance; probably it is far less likely to alter than silver itself; so that the sulphur-toned bromide or gaslight print is actually more permanent after toning than before. Sulphur has already done its worst on the image; what sulphur the

print contains is firmly combined with the silver, and a permanent print is the result.

The silver print which fades owing to the presence of sulphur is in a different category. The sulphur does not simply convert the image into silver sulphide, as in sulphur toning, but into an extremely unstable body called silver sub-sulphide, and into complex compounds of silver, sulphur, and gelatine. These in their turn undergo further changes, and the print gradually fades in the way only too well-known.

The question is sometimes asked whether this or that paper gives a permanent print. It is hardly a matter of make of paper at all, but of the treatment it receives at the hands of the photographer. Now that the reasons for the fading have been given, it should be compara-



DOLCE FAR NIENTE.

BY MRS. R. M. KING.

The original of this picture is No. 78 at the Exhibition of the Royal Photographic Society.

tively easy to take care that it shall be circumvented.

To ensure as far as possible that a silver print should be permanent, we must attend to the following points:

(1.) The toning must be with gold; that is to say, we must guard against attempting to tone with a bath exhausted of gold.

(2.) No acid must be introduced into the fixing bath.

(3.) Fixing must be complete. If fixing is not complete, no amount of washing will get rid of the decomposed hypo.

(4.) Washing should be thorough.

(5.) If the print is to be mounted, the mountant should be free from any trace of acidity, and the card-board should be pure.

If these points are attended to, we shall at least know that we have done all we can to ensure permanence. It will then be a matter dependent on the nature of the paper employed. Bromide and gaslight

prints, in this respect, are generally admitted to be more permanent than prints on P.O.P. The image on a P.O.P. print does not consist of pure silver as it should do in bromide or gaslight; and, being complex, is certainly more readily attacked by sulphur in the paper or in the atmosphere. Sulphur toned bromide and gaslight prints probably come first, therefore, in order of permanence. Then the same prints untuned. Then prints on P.O.P. toned with gold. Then P.O.P. prints toned with platinum. In putting platinum toned prints behind gold toned prints in such a case, we do so because the toning is not complete. Were platinum to be substituted for silver completely, the print might reasonably be regarded as permanent as a platinum print pure and simple. But platinum toning at the most is only a slight plating of the silver image with the rarer metal, and if the silver is attacked the image fades in spite of the presence of some platinum.



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TO CONTRIBUTORS.—The Editor will be glad to consider original up-to-date manuscripts on photographic subjects. All contributions must be typewritten, or in very legible handwriting, on one side of the paper only, and should bear the name and address of the sender. Letters or communications arising out of matters already appearing in the paper are not paid for. The Editor disclaims legal responsibility for the safety of matter submitted to him, but he will endeavour to return rejected manuscripts, etc., when a stamped addressed envelope is enclosed for that purpose. No notice whatever can be paid to communications without the name and address of the sender, not necessarily for publication.

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PAYMENTS.—Articles and illustrations are paid for on acceptance.

INTERVIEWS.—The Editor will be at 20, Tudor Street, on Wednesdays, between the hours of 9.30 and 11.30 a.m., but can only be seen at other times by appointment.



THE ROTHERHAM PHOTOGRAPHIC SOCIETY'S Exhibition, which has just been held in the Drill Hall, Rotherham, proved exceedingly attractive.

THE BIRMINGHAM PHOTOGRAPHIC CO., LTD., has issued a new price list of its manufactures, which will be sent by return to any reader on application to the company at Criterion Works, Stechford, near Birmingham.

THE RAJAR CAMERA for the current month has been awarded to H. Ridge, of London Road, Newport Pagnell. The Rajar P.O.P. on which it was made was purchased from J. Hogson, Church Street, Wolverton.

"THE PRISM" for September deals with the manufacture of the microscope. Messrs. A. E. Staley and Co., of 19, Thavies Inn, London, E.C., will be pleased to send a copy, as long as their supply holds out, to any reader forwarding a stamp to cover the cost of postage.

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GUM-BICHROMATE. Lecturing at the Cleveland Camera Club, Mr. Norman Bunting said that in his opinion better results were obtainable by coating and sensitising the paper in one operation than by applying the colour and sensitiser separately.

THE CAMBRIDGE AND DISTRICT Photographic Club holds an open exhibition from November 11th to 14th, entries closing October 29th. Entry forms can be obtained from the honorary secretary, Mr. T. J. Sowdon, Sunnyside, Guest Road, Cambridge.

THE EASTMAN PLATE COMPETITION. Kodak, Ltd., announce that prints for the third section of the competition will be received up to Monday, November 16th, instead of October 20th. Full particulars of the competition, in which £240 in prizes is offered, can be obtained from Kodak, Ltd., 57-61, Clerkenwell Road, London, E.C.

DANGEROUS PHOTOGRAPHY.

SIR BENJAMIN STONE has been interviewed by "M.A.P.," and in the course of his reminiscences of photography he told our contemporary that it had not always been without its dangers. Once when photographing Mount Vesuvius during an eruption "I could see the stones being thrown into the air," said Sir Benjamin. "That there was some risk in the matter you may judge when I tell you I took some coins out of my pocket and threw them into the lava as it fell. They were covered by it, and are now in my collection."

"Twice in my life my desire to take photographs nearly cost me my life. The first time was by some Mahomedans on the banks of the Red Sea, when their feeling was more bitter on the subject than it is now. I noticed a group of men standing together and I thought they would make a good picture. Without thinking of asking their permission, I set up my camera to take them when one of them hurled a log of wood at me. The aim was good, for the log whizzed just over my head. Luckily, however, it did not hit me or I should not be here to give you this interview."

"The second time was in China. I had been taking a temple when I noticed a large crowd had gathered to see what I was doing. I therefore turned my camera round in order to take the crowd. Thereupon a great murmuring was heard which grew into a hubbub, and I could see very easily that mischief was brewing. I asked my guide what was the matter, and he replied, 'They say you have taken their spirit from them.' 'Nonsense!' I replied. 'I have taken nothing from them.' 'Haven't you got their likeness in your box?' he asked. I admitted I had. 'Then how can you say,' he exclaimed, 'you have taken nothing?' Happily, the distribution of a certain sum of money in the crowd made them change their attitude toward me, and I was allowed to depart in peace."

FRANCO-BRITISH EXHIBITION.

TWO GRAND PRIZES (Highest Awards).

A

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MESSRS. CHARLES ZIMMERMANN AND Co., of 9 and 10, St. Mary-at-Hill, London, E.C., ask us to point out that they have a lecture and demonstration by Mr. F. C. Hart, which can be delivered before societies, and that they will be glad if secretaries will communicate with them accordingly.

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THE PHOTOGRAPHY OF SPORT. Our contributor, Mr. Adolphe Abrahams, whose articles on focal plane work in *Photography and Focus* have aroused so much interest recently, is to lecture on this subject before the Royal Photographic Society at 66, Russell Square, at 8 p.m., on Tuesday, November 3rd. Visitors are always very welcome, and we have no doubt many of our readers will be glad to hear what Mr. Abrahams has to say on the topic peculiarly his own.

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LYCEUM CLUB PHOTOGRAPHERS. The photographers' section of the Lyceum club held its first annual meeting on Friday, October 16th, when the following members of the section were elected to serve on the Advisory Board for the coming year: Mrs. George Arbutnot, Miss Gertrude Bacon, Mrs. Aubrey Le Blond, Mrs. Bulstrode, Mrs. Carine Cadby, Miss Chadwick, Miss D'Espaigne Chapman, Miss Reynolds, Mrs. W. N. Shaw, Miss Lizzie Coswall Smith, Miss Susette Taylor, Miss E. L. Turner, Mrs. Victor H. Veley, and Miss Agnes B. Warburg.

GEOMETRICAL OPTICS.

A BOOK bearing this title, by Val H. Mackinney and Harry L. Taylor, has just been published by Messrs. J. and H. Taylor, of 54, Tenby Street North, Birmingham, and Christchurch, New Zealand. The book is written mainly from the point of view of the optician, using that term in its narrowest signification of eye-tester and dealer in spectacles, and is described by its authors as largely a reprint of certain chapters of "The Key to Sight Testing." It does not deal with sight testing, however, but rather with optics generally, which it does on unaccustomed lines.

Instead of the method of teaching optics usually given in text books, the curvature method is adopted, and the student learns from the start what is meant by a "diopter" and a "radian." After a chapter on the nature and properties of light, reflection at plane and curved surfaces is considered; thence we go on to refraction at plane surfaces, mirror and thin lens problems, chromatic and spherical aberration, after which the eye as an optical instrument is considered. The last chapter deals with "aids to normal vision." Some useful tables are given at the end of the book. There is a distinct field for a work of this character, which is occupied by no other work with which we are acquainted. Its direct connection with photography is only a very slight one, but indirectly every chapter has its bearing upon the design or employment of the photographic lens.

THE SCOTTISH NATIONAL SALON next year is to be held in the High School, Wishaw, opening on January 1st and closing January 9th, entries closing December 7th. The prospectus and entry form is ready, and can be obtained on application to the secretary, Mr. Robert Telfer, 138, Glasgow Road, Wishaw.

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AN AFFILIATION IN AUSTRALIA. In August last year the leading photographic societies in the State of Victoria formed the Victorian Photographic Affiliation for the purpose of legislating for exhibitions and competitions, and for other purposes connected with the welfare of the societies in which united action would be more advantageous than individual effort. The affiliation is governed by a council which is composed of representatives of the different affiliated bodies. This council has arranged, on behalf of the affiliation, to hold an open exhibition in the galleries of the Victorian Artists' Society in Melbourne, in February, 1909, and the prospectus will be published shortly. The exhibition is to remain open for at least one week, and it may be kept open for a fortnight, and there is to be no distinction made between professional and amateur workers. The affiliated bodies are: The Amateur Photographic Association of Victoria, the Gordon College Amateur Photographic Association, the Working Men's College Photographic Club, East Malvern Amateur Photographic Club, Clifton Hill Amateur Photographic Club, Footscray Camera Club, and Ballarat Camera Club. The honorary secretary is Mr. J. H. Harvey, of 128, Powlett Street, East Melbourne.

NO TRIMMING DOWN.

MR. CRAIG ANNAN mentioned in a lecture recently, says the "Glasgow Evening Times," that in the fine photographs made in the "forties" by D. O. Hill, there was no trimming down, the size of the picture was at the same time the size of the plate.

One of the pictures shown was from a negative of Mrs. Kasebier's, and not only was the whole of the negative shown in the picture, but the edge of the plate, the rebate of the negative, was printed also, thus showing that the full size of the plate used in making the negative went to form the picture produced. Most photographers would draw the line at printing in the rebate, but if more time was spent in making the exposure, so as to include only what formed the picture, much less time would need to be spent afterwards in endeavouring to select from the print the portion that made the picture. The fine dark background of Mr. Hill's portrait pictures showed that the whole of the negative was required. Instead of the knife being used to trim off a part, the portion on either side of the portrait was used so as to make the picture more effective.

"WHERE TO GO AND WHAT TO TAKE" is the title of an elegant little reprint of Mr. Dan Dunlop's article entitled "England's Playground," which appeared in *Photography* for July 30th, 1907. It is issued in the interests of the North Eastern Railway Co.

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THE SALON "SMOKER." We are asked to announce that the members of the Linked Ring much regret that, owing to the large amount of space occupied by the apparatus for the display of the colour photographs in the Gallery, it has not been found practicable to hold the usual Salon "smoker" this year.

x x x x

ABRASIVE PENCILS. Mr. W. A. Chaplin, of Cricklewood, writes: "In the issue of *Photography and Focus*, dated October 13th, your contributor Mr. H. Wild, on page 467, says: 'Some reader may perhaps be able to help by suggesting some substance not quite so soft as rouge or as gritty as pumice.' I would suggest he tries crocus powder, which is much used in the jewellery and silversmith's trade for polishing, before finally putting on the gloss with rouge. It can be obtained at all 'trade' tool shops in Clerkenwell, E.C., and also at most chemists in that district. The price is 4d. or 8d. per pound, according to quality. It cuts very finely, but well, and is, I believe, principally composed of oxide of iron. The colour is a very dark red; much blacker than rouge is, I think, its best description."

PHOTOGRAMS OF THE YEAR.

THIS annual of pictorial photography has just made its appearance, being published by Messrs. Daborn and Ward, Ltd., of 6, Farringdon Avenue, London, E.C., price 2s. nett in paper cover, 3s. in cloth. The reproductions in most cases are excellently done, and the work forms a useful reference book to the photographs of the year.

The pictures are not limited to those shown at the Royal and Salon exhibitions, but include many that have been seen at neither. In the case of many of the foreign ones, moreover, a lower standard seems to have been adopted by those who made the selection, to the manifest detriment of the representative character of the book as a whole. This is the greater pity, since there is no other year book which even attempts to do what is the aim of "Photograms of the Year."

The letterpress is of the type to which we have got accustomed, and occupies many pages which we would much prefer to see filled with pictures. Such comments about a photograph as "not nearly equal to his captures of recent years" can serve no useful purpose whatever; while most of the remarks seem based on a determination to say something that shall please the producer of the print that is being referred to—a kindly sentiment, but one quite fatal to serious criticism.

The book as a whole is well worth the price charged for it.

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BEGINNERS' COMPETITION.

Open to all photographers who have never taken an award.

PRIZES.

First Prize.—A signed copy of "The Complete Photographer," a half-guinea work by Mr. Child Bayley, now in its second edition.

Second Prize.—A free subscription to *Photography and Focus* for twelve months.

One or more certificates of honourable mention will also be awarded.

RULES.

(1) Each competitor can send as many prints as he likes, but each print must bear on the back the coupon, published each week, the name and address of the sender, the title of the picture, and no other writing whatsoever.

(2) No print will be eligible that is larger than 5½ in. x 3½ in. (postcard size) or 5 in. x 4 in.

(3) No print must be mounted.

(4) No handwork other than simple spotting is permitted on negative or print, nor shading or dodging of any kind. It is distinctly understood that entry in the competition implies a declaration by the competitor that this rule has been complied with; and in case of dispute, the editor shall have the right to call for the negative from which the entry purports to be a simple direct contact print.

(5) No prints will be returned, and no correspondence with regard to the competition can be undertaken.

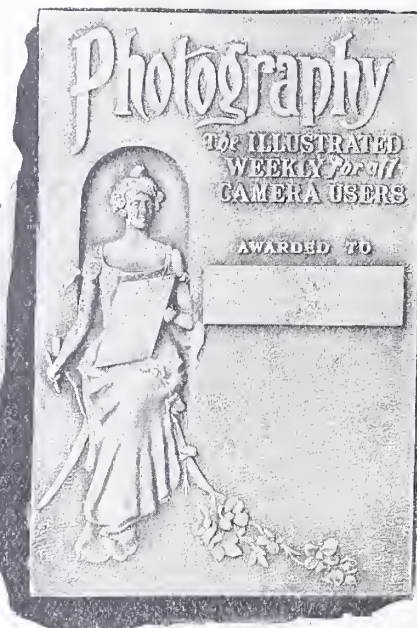
(6) The publishers of *Photography and Focus* shall have the right to reproduce, without payment, any of the prints sent in, winning or otherwise. But except the winning prints, the names of competitors of other prints that may be reproduced will not be published without the competitor's consent.

(7) All entries must be addressed "Beginners' Competition," the Editor of *Photography and Focus*, 20, Tudor Street, London, E.C., and must be delivered at that address by the first post on the closing date at the very latest.

CLOSING DATE.—Saturday, Oct. 31st.



"Photography" Medal. Actual size.



"Photography" Plaque. Actual size.
Weight in silver over three ounces.

ADVANCED WORKERS' PRINT COMPETITION.

PRIZES.

First.—"Photography" Silver Plaque.
Second.—"Photography" Bronze Plaque.
Third.—"Photography" Bronze Medal.

One or more certificates of honourable mention will also be awarded.

RULES.

(1) All photographs must be sent addressed "Advanced Competition," the Editor of *Photography and Focus*, 20, Tudor Street, London, E.C., postage paid, to reach there not later than the first post on the closing date, and must contain a stamped addressed envelope or label (not loose stamps) if they are to be returned.

(2) Each photograph must be mounted, but not framed. Prints in slip-in mounts are not eligible. Each must bear on the back the name and address of the sender and the title of the picture. No letters or other communications must be enclosed with the prints. Every print must bear attached to its mount a coupon for the competition of the month, which will be found in each issue of the paper.

(3) Each photograph must be the work of the competitor as regards selection and arrangement of the subject, exposure and development of the negative, and printing, development or toning, and mounting of the print.

(4) The prints which are accompanied by stamped envelopes or labels will be criticised by post, and the editor shall have the right to reproduce any of the prints, winning or otherwise. The awards will be made a fortnight after the closing date.

(5) Awards may be increased or withheld at the absolute discretion of the judge, and in all cases of dispute the decision of the editor will be final.

(6) There is no restriction as to the eligibility, except as set forth in these rules, and except that the same negative must not be used more than once in the competition. That is to say, that a print from it once submitted, all further prints, however varied, are ineligible.

(7) Neither editor nor publishers of *Photography and Focus* shall be held in any way responsible for the safety of prints or for their return to the competitors.

(8) The sending of a print to the competition will be regarded as a declaration to the effect that it is eligible under these rules, and that the competitor agrees thereto.

CLOSING DATE.—Saturday, Oct. 31st.

SPECIAL SUBJECT COMPETITIONS. OPEN TO ALL READERS.

PRIZES.

First Prize.—"Photography" Plaque in Silver.
Second Prize.—"Photography" Plaque in Bronze.
Third Prize.—"Photography" Medal in Bronze.
One or more certificates will also be awarded.

RULES.

(1) The subject of each photograph entered must be that announced for the particular competition.

(2) Each competitor can send as many prints as he likes, but each print must bear on the back the name and address of the sender, the title of the picture, and no other writing whatsoever. Each print must have attached to it a coupon for the competition of the month, which will be found in each issue of the paper.

(3) No print must be mounted. No handwork other than simple spotting is permitted on negative or print, nor shading or dodging of any kind. It is distinctly understood that entry in the competition implies a declaration by the competitor that this rule has been complied with; and in case of dispute, the editor shall have

the right to call for the original negative from which the entry purports to be a simple direct contact print.

(4) No prints will be returned, and no correspondence with regard to the competition can be undertaken.

(5) The publishers of *Photography and Focus* shall have the right to reproduce, without payment, any of the prints sent in, winning or otherwise. But except the winning prints, the names of the senders of other prints that may be reproduced will not be published without the sender's consent.

(6) All entries must be addressed "Special Subject Competition," the Editor of *Photography and Focus*, 20, Tudor Street, London, E.C., and must be delivered at that address by the first post on the closing date at the very latest.

SUBJECTS AND CLOSING DATES.

A Portrait of a Lady. Closes Saturday, October 31st.

A Domestic Interior. Closes Monday, November 30th.

A subject suitable for use as a Christmas or New Year Card. Closes Thursday, December 31st.

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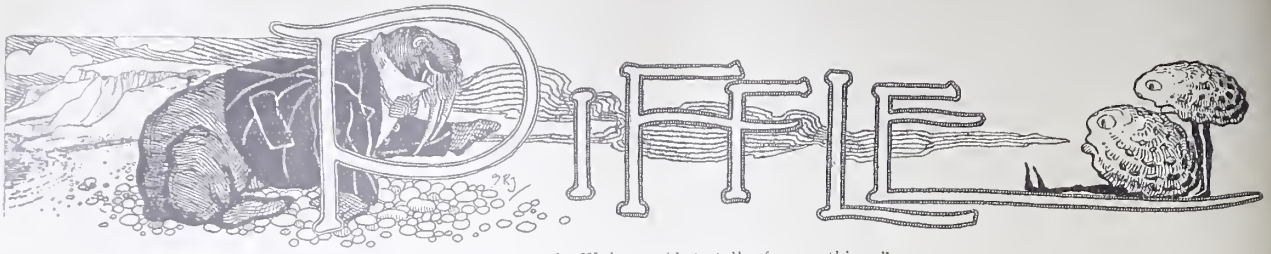
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"The time has come, the Walrus said, to talk of many things."

THERE must have been, first and last, many hundreds of patents taken out in connection with photographic apparatus and processes. The majority of the ideas embodied in them are of the ten-a penny brand, but I could not help admiring one little notion that formed the subject of a recent patent. The idea itself was of very modest dimensions, but it suggested possibilities of expansion. It was claimed that an improvement would be effected in photographic portraits by cutting out the pupil of the eye, and placing at the back of the hole thus formed some glittering substance to give a fiery and lifelike look to the orb. I don't suppose the patentee would apply this process to every optic in a half-plate group of fifty or sixty persons. It is evidently intended for portraits of such size that there would be a sufficient area of eye-backing to produce a noticeable glitter. The patentee might have gone a step farther and arranged for rigging up a small electric battery in the mount so as to project actual rays through small lenses fitted in the holes where the pupils once were.

* * *

This would be very impressive.

* * *

Another touch of realism in the case of some portraits could be obtained by rubbing away the paper from behind the nose until nothing but the photographic film was left, and then backing it up with a piece of red flannel. This would impart just the right glow, and give a most natural and lifelike appearance. The eyes in this case should not be backed up with glitterers, but just left fishy as they are. A good deal might be done also in the way of adding real whiskers. But I will say no more on this point, as I seem to have the material for quite a number of patents myself.

* * *

I have read lately that national characteristics are discernible in photographic portraits. Thus in a photograph of a British face we are said to be confronted with stolidity and completeness. It is gratifying to us as a nation that our portraits do not present us with only one eye, or the mere framework of a nose, and that there is nothing lacking in the matter of cheek. As for the stolidity, I presume an exception must be made in the case of the picture postcard actress. The French portrait provides us with daintiness and imagination. It may be so; but I have seen photographs of Frenchmen in which any suggestion of daintiness is purely and entirely imaginary.

* * *

The German portrait is forceful. Great is the power of the sausage, and potent is the lager mug. I hardly like to repeat what the writer says of the American portrait, because the bare truth is not always palatable. He briefly observes that it is eccentric. We will let it go at that.

* * *

It is probably not quite such a simple matter as the writer would lead us to suppose to be able to identify the nationality of a man from his photograph. Except in the case of the American. There would certainly be some difficulty in labelling the portrait of a man whose father was a Scotsman, his mother a German, and who had been reared by a French nurse. The stolidity would very likely have got mixed up with the daintiness. There are many of my own acquaintances, proud of their pure British blood, whose portraits would certainly result in their being ticketed as Americans; and there are others whose photographs would never receive consideration on the question of nationality, as they would be mistaken for zoological studies, or for designs for door knockers. Mr. Harvey Piper stated the other day that medieval sculptors obtained their designs for hideous and grotesque gargoyles from the faces of their contemporaries.

But surely the modern gargoyle maker is still better provided with material. Your portrait, dear reader, or mine, may be employed any day as a suitable pattern for a stone gutter spout.

* * *

When I was at the New Gallery the other evening I heard of an incident that provoked me to such mirth that I inadvertently swallowed what was left of my cigar. I did not wholly regret this, because it was a presentation cigar, and, in spite of the label, I am inclined to think that the material was originally intended as an article of diet. It appears that a visitor was being shown by an attendant at one of the stalls a new reflex camera, which is a source of considerable pride and income to its maker. The attendant had patiently described the innumerable virtues of the instrument, and had moreover succeeded in making several parts of its mechanism work without the usual number of hitches. Finally, the visitor asked, "How much do you say this camera is?" "Forty pounds," replied the attendant. "Yes," blandly observed the visitor, "I know the weight, but what is the price?"

* * *

The friends of the attendant desire that no flowers shall be sent.

* * *

A foreign photographer has hit upon an original idea for attracting public attention to his establishment. During the day a troupe of acrobats gives performances outside the shop. This is a good notion, which other photographers might follow. The only attempt I have seen made in the same direction was so crude that it was foredoomed to failure.

* * *

A dealer set up a huge gramophone inside his shop, with a huge trumpet that hurled dismaying sounds through the front door. The result was just what might have been expected. Instead of eager crowds flocking into the shop to buy cameras and things there was a universal stampede for safety in all directions. We can surely do better than this. I suggest that professional photographers should train themselves to give tightrope performances on the neighbouring telephone wires. It would be very effective if one balanced himself and his apparatus on a wire in mid-air, and went through the operations of taking an imaginary portrait. He need not use his best apparatus, as it would certainly be damaged in the fall. A good effect might also be produced by a company of comedians giving a performance in dumb show in the shop window. It is a sure catch to have a camera with a comic lens that squirts water in the face of the idiotic sitter who might be dressed as Charley's Aunt. The aunt should finish up by belabouring the operator with the comic camera, and thrusting his head through the plate glass window to invite the crowd to step inside and be taken for ninnepence.

THE WALRUS.

SUBSCRIPTIONS.

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PHOTOGRAPHY. NOVEMBER 3RD, 1908.

PHOTOGRAPHY

A JOURNAL FOR EVERY CAMERA USER.

EDITED BY R. CHILD BAYLEY.

PUBLISHED WEEKLY.

NOVEMBER 3RD, 1908. TUESDAY. No. 1,043 Vol. XXVI.



ANOTHER DAY DRAWS NEAR ITS CLOSE.

BY WILLIAM TECTOR.



EDITORIAL

The Two London Exhibitions.

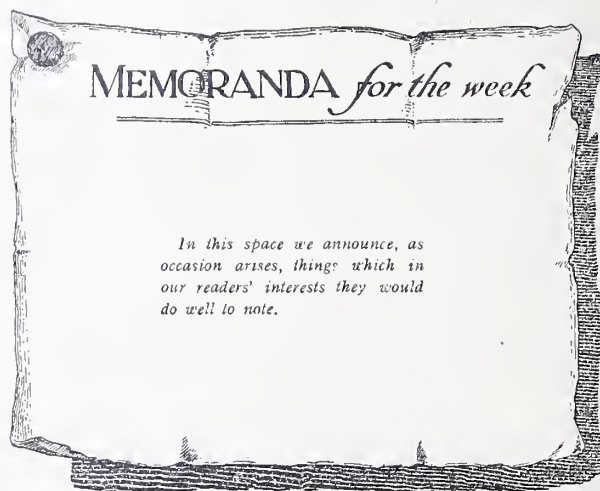
The Salon and the R.P.S. exhibition are now closed. The attendance at the New Gallery, in spite of the fact that the Franco-British Exhibition brought many visitors to London who would not otherwise have come, has been very disappointing, we are sorry to hear; but the Society can hardly expect a novelty of the "drawing" power of the Autochrome process every year. The exhibition interest has passed to the provinces, and from now until Easter there will not be a week without one or more exhibitions being held. The most important, of course, are the Northern at Manchester and the National Scottish Salon at Wishaw; but many of the others are always excellently representative of modern amateur photography, and we would strongly advise those of our readers who have the opportunity of seeing them not to miss it.

Frauds in Lenses.

During the past week we were shown by Messrs. C. P. Goerz a lens which was recently sold by auction in Glasgow. Although only a rapid rectilinear of a very cheap character, and marked as such in one place, the mount had been engraved with the name of "Goerz" and the word "Pantar" and hieroglyphics representing the focal length, etc. In fact, it had been fraudulently engraved in the hope of deluding some unwary purchaser into the belief that he was buying a high-class lens by a maker of the very front rank. We understand that there has been quite an industry carried on in these things in Glasgow of late, which Messrs. Goerz are doing their best to investigate and stop. In the meantime, we would caution our readers against purchasing second-hand lenses from a doubtful source—and an auction room and a pawnbroker's shop are two of the most doubtful in such a case—unless they are in a position to estimate the true value of what they are buying.

The particular case to which we have just referred was a very clumsy fraud. Merely a cursory examination of the lens would have revealed the fact that, while in one part it bore the name of "Goerz" and the description "Pantar," in another it bore the name of the large wholesale house who had originally sold it and their own description "rectilinear." Much more artistic deceptions than this are to be met with. The design of some forms of shutter and hand camera

leads to the replacing of the original lens tube of the maker bearing his name by a tube carrying the shutter, and there is no doubt that in the past these discarded tubes have been got hold of by unscrupulous persons, fitted with lenses of a worthless character, and sold as the make of those whose name they bore. It is usual now with many of the best instruments for the cell of each component combination to be marked with its maker's name and the focus, and this should be looked for. But even the presence of the name is no guarantee that the lens is what it purports to be, as the case we have just mentioned shows clearly enough, and the amateur who is not able to judge the merits of a lens for himself should be careful only to purchase from a source in which he can put complete confidence.



Restoring Faded Silver Prints.

Mercurial intensification is one of the methods put forward for bringing back to full vigour silver prints which have faded. It is probably the best, and of mercurial intensification the best modification is that which was introduced by Mr. Chapman Jones. To employ this the faded print should first be well washed to get rid of all soluble impurities that might be present in the paper, to which perhaps the fading is due. The picture is

then bleached as far as it will go in a solution of mercuric chloride, the strength of which is not important, and is again washed. If dilute hydrochloric acid (say one per cent. strength) is employed for some of the intermediate washings at this stage it will be all the better. A freshly mixed ferrous oxalate developer is then applied to darken the picture, using for this purpose saturated solutions of potassium oxalate and ferrous sulphate, pouring one part of the latter into five of the former. After the developer has darkened the print as far as it will go it is washed in four changes of very dilute citric acid, say five grains to the ounce, then in water, and is dried.

We are often asked how faded prints which are valued can be restored. The process just described is what we ourselves would adopt, but only as a last resource. If the print is irreplaceable it is better to do all that can be done to secure a good copy in the camera before exposing it to the risk which rewetting always involves. Many prints that seem to be faded almost away, copy (on ordinary, not orthochromatic, plates) much better than they look.

Vanished Processes.

The print which we reproduce this week on page 530 is a record of a photography as different from that of to-day as it is possible to imagine. Although for certain purposes some of the processes which were in vogue in 1858 are still employed (the wet plate method, by means of which the illustrations in *Photography and Focus* are reproduced, is a case in point), amateur photography has been revolutionised in all its details. Apparatus and material alike have changed. The amateur of 1858, if he used glass and not paper for his negatives, took with him into the field a complete outfit not merely for developing his negatives, but even for coating his plates on the spot. It had at least the advantage that he knew what he was doing, and that if his first negative did not come up to his expectations he could clean it off the glass there and then and start afresh. A good photograph in those days was a technical triumph for its producer. Is it so to-day? Or does the triumph belong to the manufacturer who makes the film or plate and the printing paper, or perhaps the dealer

who does the developing or the trade firm which makes, mounts, and frames the enlargement?

Is Photography Increasing in Interest?

It is doubtful whether the continued simplification of photographic processes does not tend at the same time to deprive them of much of their interest. This is well shown in the case of time development. We know of photographers who do not adopt time development for the openly expressed reason that they like to see the image appear, and to endeavour to adjust the developer to the exposure. To put the plates in a tank of solution for a certain number of minutes and then to fix them automatically may or may not give them a higher average of good negatives, but it deprives them of an interesting occupation, and to get an interesting occupation was the reason they took up photography. There is a good deal to be said for this view, though it leaves out of the question entirely the pleasure derived from the results of the photography, which is certainly the motive with the great majority of amateur photographers.



The Week's Meetings

MONDAY, NOVEMBER 2ND.

Cleveland C.C. "Wellington Specialities." H. Wade.
 Rodley, F.C. & B.P.S. "Figure Studies." W. Cohen.
 Bowes Park & D.P.S. "Ozohrone." Thomas Manly.
 Bradford P.S. "Thornton-Pickard Slides and Apparatus." R. Hesketh.
 Stafford P.S. "Enlarged Negatives on Paper." Herbert A. E. Hey.
 South London P.S. "The Right Way in Photography." Burroughs, Wellcome, and Co.
 Bradford Grammar School P.S. "Plate Making." Hubert Henry.
 Walthamstow P.S. "The Oil Process." W. H. Gilbert.
 Herefordshire P.S. *Photography and Focus* Prize Slides.

TUESDAY, NOVEMBER 3RD.

Birmingham P.S. "Velox Papers." W. F. Slater.
 Nelson C.C. "Flashlight Demonstration." J. E. Ashworth.
 Blackburn & D.C.C. "Design in Picture Making." Walter Barnes.
 Halifax C.C. "An Architectural Cause." A. Moore.
 Otley & D.C. & Art S. "A Scottish Cruise." Miss Lowrey.
 Glasgow Southern P.A. Lecturettes.
 Leeds P.S. "Walks and Climbs in Switzerland." Percy Lund.
 Keighley & D.P.A. "Yorkshire: Historic and Picturesque." G. Hepworth.
 Nelson P.S. "The Amateur & Professional in Photography."
 Sheffield P.S. "Sketch of the History of English Architecture." H. Baker.
 Chelmsford P.S. "The Chemistry of Photography." Allen Neville.
 Hanley P.S. "Chemicals used in Photography." W. F. Malkin.
 Monklands P.S. "How Combination Prints are Made." G. L. A. Blair.
 Worthing C.C. "Tasmania." A. C. Osborn.
 Erdington P.S. "Holland."
 Bootle P.S. "Lantern Slides from Prize Pictures." Thornton-Pickard Co.
 Chiswick C.C. Round Table Evening.
 Shropshire C.C. *Photography and Focus* Prize Slides.

WEDNESDAY, NOVEMBER 4TH.

Coventry P.S. "Velox Papers." W. F. Slater.
 Huddersfield N. & P.S. "Austrian Alps." C. B. Howdill.
 North Middlesex P.S. "Lantern Slide competition."
 G.E.R. Mech. Inst. "After treatment of Negatives and Bromide Prints." H. W. Bennett.
 South Suburban P.S. "Various Novel Lighting Effects." H. E. Corke.
 Edinburgh P.S. "Slide Making under Difficulties." Ramsay Traquair.
 Leeds C. "A Tour Round an Old Garden." Alex. Keighley.
 Wimbledon Park P.S. "Bromide Enlarging." H. P. Johnson.
 Sheffield Friends' P.S. "Pictorial Composition." Walter Nell.
 Everton C.C. "Flashlight Photography." E. C. Alcock.
 Boro'. Poly. P.S. "Holland Pictorially Portrayed." Rev. H. O. Fenton.

Societies will have their meetings announced here if the syllabus is sent to us at the beginning of the Session, or from time to time.

WEDNESDAY, NOVEMBER 4TH (continued).

Hackney P.S. "By the Severn Sea." A. J. Lingford.
 Aston-under-Lyne. Exhibition.

THURSDAY, NOVEMBER 5TH.

Handsworth P.S. "Velox Paper." W. F. Slater.
 Hull P.S. "Siena, San Gimignano, and other Mediaeval Cities of Tuscany." T. E. Green.
 Ilford P.S. Platinotype Co. Demonstration.
 Midlothian P.A. "Evolution of a Picture or Art in Photography." George L. A. Blair.
 Liverpool A.P.A. "Lantern Slide Making." Fred. G. Tryhorn.
 Wimbledon & D.C.C. "Orthochromatic Photography." T. W. Derrington.
 Brighouse P.S. "Ruined Abbeys of Yorkshire." Rev. Joseph Beanland.
 Heaton & D.C.C. "Lantern Slide Making." J. Barr.
 Small Heath P.S. "Gaslight Paper." Alfred Roffey.
 Sutton P.C. "Slide Making." J. W. S. Burmester.
 Hackney P.S. "In the Moselle Valley." W. L. F. Wastell.
 Wembley & Sudbury C.C. "Lantern Slide Making."
 Liverpool A.P.A. "Lantern Slide Making." Fred. G. Tryhorn.
 Longton P.S. *Photography and Focus* Prize Slides.

FRIDAY, NOVEMBER 6TH.

Loughborough P.S. "Velox Papers." W. F. Slater.
 Birkenhead P.A. "Hiats on Enlarging." F. H. Bracher.
 Bromley C.C. "Elementary Optics as Applied to Lenses." A. J. Harris.
 Hackney P.S. "On the Thames." J. McIntosh.
 Lincoln A.P.S. "Wellington & Ward's Specialities." Harry Wade.

SATURDAY, NOVEMBER 7TH.

Bolton A.P.S. "Outdoor Figure Work." T. H. Greenhall.

MONDAY, NOVEMBER 9TH

Attercliffe P.S. Annual Meeting.
 Southport P.S. "Velox Paper." W. F. Slater.
 Oxford C.C. Exhibition of Members' Lantern Slides.
 Preston C.C. "Other People's Children." Kenneth Bishop.
 Wolverhampton P.S. "The Humble Beauties of the Flower World." E. Seymour.
 Bradford P.S. "Photographic Fakes." J. F. Seaman.
 Cripplegate P.S. "Exposure and Development for the Subject." C. W. Coe.
 Kidderminster & D.P.S. "Trimming and Mounting." H. W. West.
 Leicester P.S. Thornton-Pickard Manf Co's Specialities. R. Hesketh.
 Leek P.S. *Photography and Focus* Prize Slides.

Measuring and Weighing.

Answering some of the questions which worry everyone who attempts for the first time to make up his own solutions.



M

EASURING and weighing are two operations which enter very largely into the work of the amateur photographer. Even if he adopts such

labour-saving conveniences as "tabloids" or "cart-ridges" of chemicals, at least he has to measure the liquid in which they are to be dissolved. It is not at all likely that he did any measuring before he took up photography, so the process may be a little unfamiliar.

★ ★ ★

The most convenient form of measure.

There are two distinct forms of measure which are on sale at the dealers—Those which are conical in shape, running down almost to a point, and those which are cylindrical or nearly so. The photographer who wishes to manage with a single measure will find a two-ounce conical one the most useful. The conical form enables the measuring to be done with a degree of accuracy proportional to the quantity measured. If several measures are to be bought, the cylindrical or else the somewhat similar cup-shaped vessels are to be preferred. An ordinary tumbler will be found to hold as nearly as possible ten ounces, and having tested one and found that it has this capacity, it may be put on one side and used to measure this quantity. It can be graduated to show five ounces also, by measuring that quantity with the two-ounce measure as carefully as possible, and making a scratch with a diamond or file or even with a sharp edge of flint or of broken glass on the outside of the tumbler.

★ ★ ★

The right way and the wrong way in measuring.

When liquid is poured into a measure, it should be held up to the light, with the graduations turned towards the eye, so that the right quantity can be seen at once. It is a slovenly practice to splash enough into the measure and then to pour the excess back into the bottle, both because it introduces a risk of contaminating the stock in the bottle with dust or impurity from the measure, and still more because it makes measuring much more difficult. This it does, because when the pouring back is being done the measure is tilted, and so one cannot see how much to pour; it can only be done by guess, bringing back the measure to the horizontal from time to time to see if it has been done properly. Whereas, when the measuring is done by pouring into the glass, the measure is horizontal all the time, and the quantity can be adjusted easily. It will be noticed in

measuring that the top of the liquid in the measure does not appear to be level; its edges appear to adhere somewhat to the glass. The quantity must be judged by the liquid in the centre and not by the edges.

★ ★ ★

A FLUID ounce without a measure.

The ounce of water may seem to be a little confusing while weights and measures are unfamiliar, because an ounce always suggests a weight, and we are not accustomed to weighing liquids. The fluid ounce of water at ordinary temperatures also weighs an ounce—an avoirdupois ounce. So that if we wanted an ounce of water and had no measure handy, a little vessel might be put in one pan of the scales, counterbalanced with shot or coins or some other weights put in the other pan. Then adding to the counterpoise the one ounce (avoirdupois) weight, water might be poured into the vessel till the beam hung level. The water added would be a fluid ounce, quite as accurately as it would be measured, perhaps more so. It is only water that may be "measured by weight" in this way. A fluid ounce of hypo solution weighs more than an ounce, while a fluid ounce of alcohol weighs less.

★ ★ ★

An easy way of making ten per cent. solutions.

Coins, especially halfpence and farthings, are most convenient weights for photographers. It is a good plan to keep a few halfpennies—preferably new ones, as they are more accurate—in the box along with the weights. Five halfpennies weigh an avoirdupois ounce. Ten farthings have the same weight. (A penny, which weighs nearly 146 grains, is not so useful; three pennies weigh an ounce.) Consequently, if at any time we want to make up a small quantity of a ten per cent. solution, all we have to do is to put a farthing in one scale and the substance in the other, and when we have got a farthing's weight of it we dissolve it in something less than an ounce of water, and then add water until the solution is exactly an ounce in measure, and we have our ten per cent. solution at once. Those who want an aid to memory in such things should remember therefore that a farthing's weight in one ounce or a halfpenny's weight in two ounces is a ten per cent. solution. In the same way a farthing's weight in two ounces is a five per cent. solution.

★ ★ ★

The various sorts of ounces.

Ounces of various sorts—ounces by weight that is—needlessly worrying. The old "apothecaries' weight" is that



Dolly's Tea Party.

W. D. G. Day.

by which the weights supplied to photographers are graduated. The grain weights are the same, whether the system is apothecaries' weight or avoirdupois weight. By apothecaries' weight, twenty grains make one scruple, sixty grains or three scruples one dram, and eight drams or twenty-four scruples one apothecaries' ounce. This ounce, it will be seen, consists therefore of 480 grains. Whenever a dram weight is spoken of, it means a weight of sixty grains. Avoirdupois weight used to have a dram or drachm also; but this is obsolete, and we therefore have in avoirdupois weight $437\frac{1}{2}$ grains one avoirdupois ounce, sixteen ounces one pound. This need not be so confusing as it seems. All the photographer need do is to remember that whenever an ounce by weight is mentioned it means the avoirdupois ounce of $437\frac{1}{2}$ grains, and if he has ounce and half-ounce and quarter-ounce weights they should be these. When he buys his chemicals by the ounce this is the weight he should receive. When a formula mentions "ounces," if he takes it to mean this ounce invariably,

even if the writer of the formula did not so mean it, there is no ordinary photographic operation he can undertake wherein it will make the slightest difference to success or failure.

◆ ◆ ◆

NICETIES of weighing.

Besides halfpence, there are one or two other things that might well find a place along with the scales and weights. One of these is a packet of cigarette papers. When weighing chemicals they should never be put into the bare pan, whether this is glass or metal, but a cigarette paper should be laid in the pan to receive them. It is a needless refinement to put a similar paper in the other pan to counterbalance it, but if heavier papers are used for the purpose one may be put in each pan for accurate weighing. Glass pans are better than metal for photographic purposes, as the latter are attacked by many chemicals. For some—iodine for example—the paper is an insufficient protection, and a watch-glass should be put in the pan and counterbalanced.



DISPERSING THE GLOOM,

BY JAMES C. BATKIN.

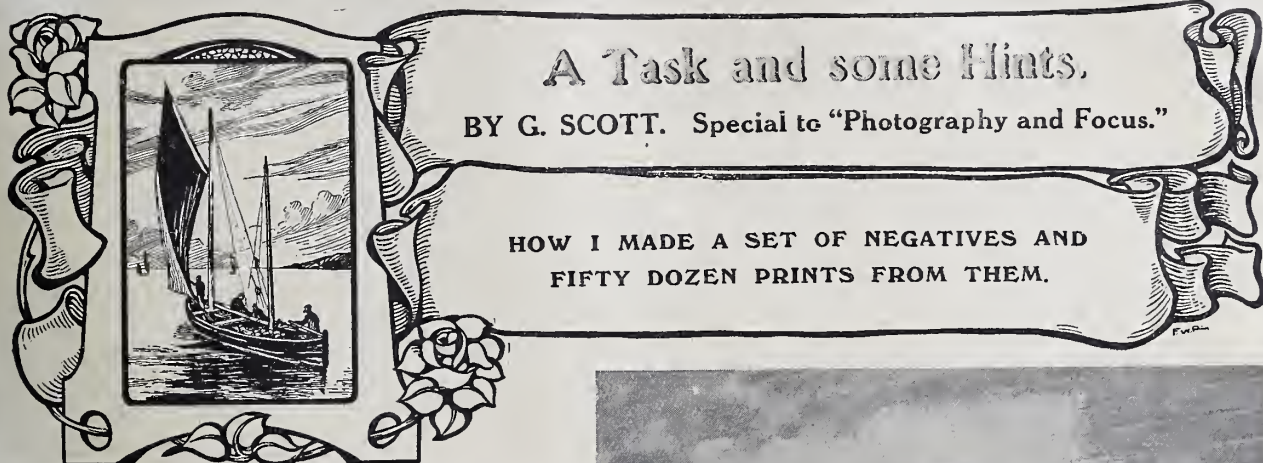
The original of this picture was No. 85 at the Exhibition of the Royal Photographic Society.



RADIANT MORN.

The original of this picture was No. 213 at the Exhibition of the Royal Photographic Society.

BY WALTER PICKERING.



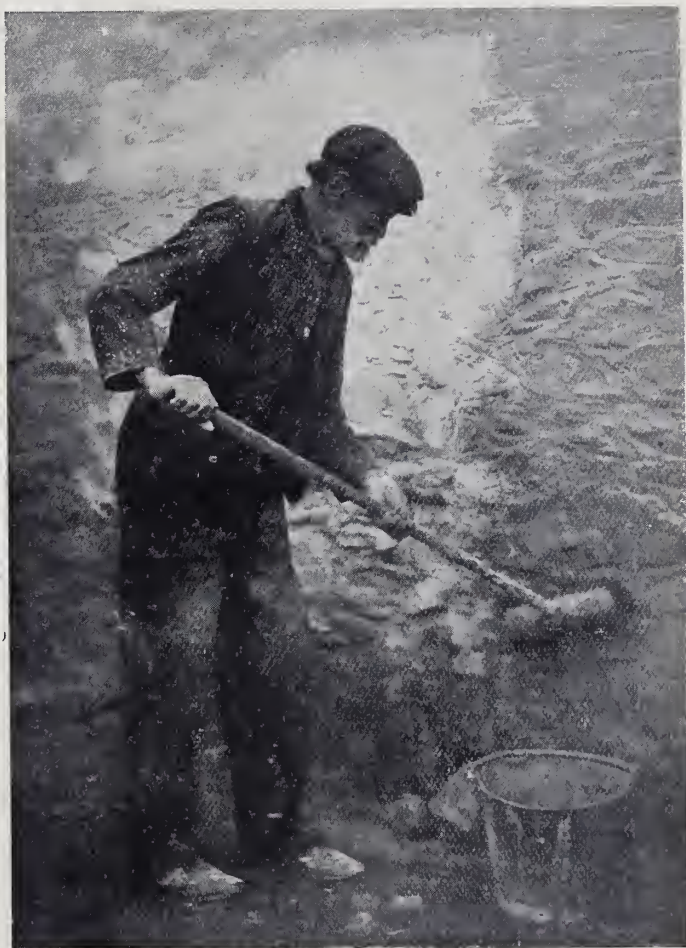
A GOOD many amateurs would consider it a somewhat hereulean task to make a set of negatives and produce from them in a reasonably short time some fifty dozen glossy prints. If I relate briefly my own experiences in carrying through such a task there may crop up here and there a useful hint, not only for those who occasionally have a heavy batch to turn out, but also for those whose work is always on a more restricted scale.

It was my intention to make a set of straightforward records of some of the buildings at the Franco-British Exhibition, together with a few figure studies by way of variety. At the outset it was clear that the character of the subject must be taken into account. A mass of white buildings in bright sunlight was vastly different from a Senegal negro in the shadow of a palm hut. Between these two extremes were other subjects where high light and shadow occurred together in varying proportions. Here, then, our first lesson is learnt. It is necessary to consider the class of subject that lies before the camera. The hand camera user who wanders about and makes the whole of the day's exposures with the same stop in the lens and the same speed to the shutter will find that the majority of his exposures are wrong.

There is also the difficulty of deciding the exposure when one is between the devil of a glittering high light and the deep sea of intense shadow. To get a good result there is only one way out of the difficulty. There is a golden rule that is the most valuable a beginner can adopt once for all. It is, to give sufficient exposure to register the shadow detail on the plate, and then to stop development as soon as the high lights have acquired sufficient density on the negative. To put it the other way, it amounts to avoiding under-exposure and over-development.

Another point which required consideration was the lighting. A dead white building with the sun full on it, and standing out against a clear blue sky, could not possibly make an effective photograph, whereas with a side-lighting and a few strong clouds the whole aspect of the thing would be changed.

Then there was the question of colour. White and blue show a strong contrast to the eye, but the photograph reduces that pleasing contrast to a minimum. I used a reflex camera for the work, and was struck once again by the intensity of the colouring reflected on the finder. I showed some of the views on the ground-glass to friends, who were astonished at what they saw. For example, white buildings partly in shadow and partly illuminated by the rays of the low evening sun appeared to the eye as grey and white mainly. The reflector of the camera presented a beautiful purple for the shadows and a pale orange for the lights.



THE OLD-FASHIONED WAY.

By J. S. LAKIN.

Awarded a Certificate in the Beginners' Competition for August, 1908.

The painter sees colours so, and sets them down, but the untrained eye regards his tints dubiously, and considers them exaggerated.

The explanation seems to be simple. An amount of colour that is practically invisible when distributed over a large area becomes clearly apparent when concentrated into a small space. A drop of red ink will make a vivid blot on paper, but stirred up in a glass of water practically vanishes. The bearing of this on our photographic work is important. We must guard against being led away by strong and brilliant colour contrasts as presented to us by the finder and the focussing screen. The question is, what will it be like when translated into monochrome?

What I have said so far by no means refers only to the particular set of subjects with which I was dealing. It

applies to all photographic work. Class of subject, lighting, colour, exposure, and development must all be carefully considered in every case. Not that the most careful attention will prevent occasional errors and shortcomings, but the lack of it will mean that success will only be occasional and accidental.

And now for the prints. For such a purpose as the one under consideration, I use Wellington "Enammo" bromide, and can comfortably produce a batch of six dozen in an hour and a half. That is to say I get that number in the fixing bath in the time. For the developer I dissolve one ounce of sodium sulphite in a pint of water, and add fifty grains of amidol. This will develop the whole six dozen prints, and the last print will be as good a colour as the first. The fixing bath is one pound of hypo in four pints of water.

Each negative has pencilled on the clear margin the number of seconds exposure it requires to the light in the darkroom lantern at a fixed distance. Knowing the correct exposure, I expose four pieces of paper behind a negative, and place them all at once direct in the dish of developer. From there they are transferred to a dish of clean water and thence into the fixing bath. The latter I place in a 12 x 10 dish, so that the four prints lie comfortably side by side, and are well exposed to the action of the hypo until the next four are placed on top of them. These operations are repeated until the whole of the prints are in the fixing bath. They are then moved about for a quarter of an hour, and transferred to the washing tank.

It will be seen that some of the prints are in the hypo for nearly two hours, and it must be noted that some papers would not stand this. The prints would be very much reduced by so long an immersion. "Enammo" is apparently quite unaffected.

Another word of caution is necessary. The rapidity of the paper in different packets may vary considerably, this depending, I imagine, not on variation in the emulsion, but on the age of the paper. The best plan is to expose a single sheet from each packet first, and see if it responds correctly to the exposure marked on the negative.

A Photograph Fifty Years Old.



The Armoury, Cirencester, 1858.

By E. H. Perring

When the photograph reproduced above was taken

There were no gelatine plates.

There were no anastigmat lenses.

Even the rapid rectilinear was in the future.

There was no bromide paper, and there was no gaslight paper.

There was no such thing as P.O.P.

Carbon and platinum printing were alike unknown.

In fact, every branch of photography has been revolutionised in the period represented by the print; and gold toning and fixing with hypo are the only processes which an amateur then and an amateur now would both practise, and even toning has been largely modified.

Glossy bromide is very subject to surface markings, especially when not quite fresh. The remedy usually suggested is rubbing with a tuft of cotton-wool moistened with methylated spirit. My own method of removing the markings is, I think, simpler and more effective. I place each print separately in a dish of clean water and rub the surface well, under water, with a small soft sponge. The worst markings promptly disappear and a vast improvement is made in the print.

Before glazing the prints I generally, though not always, pin them up to dry. I then soak them for a few minutes in water and squeegee them down on to a sheet of plate-glass. They peel off readily when dry without even a suggestion of sticking, and are then ready for a slip-in album.

What I have described is certainly not a very high form of photographic work, but if we want small glossy prints at all it is well to have them of a uniform black and white, correctly exposed and developed, and with a clean bright surface. With method and a little practice it is astonishing with what absolute certainty batches of such prints can be quickly produced.

HOW I MAKE MY CAMERA PAY

By L.S. Brown
Special to Photography & Focus

ONE OF A SERIES OF
ARTICLES SHOWING HOW
EVERY AMATEUR MAY
RECOUP AT LEAST SOME
OF HIS OUTLAY.

IHAVE often been asked, "Are photographs of places saleable to the press?" The reply is both "Yes" and "No." As a rule the topographical type of picture is the least marketable of all, in Fleet Street. The man who goes to Llandudno for his holiday will have very little chance of placing a snap of Llandudno with, say, "The Graphic." Of course, if there is an earthquake at Llandudno, "The Graphic" and all the other papers will be willing to consider views taken both before and after the event. But earthquakes are rare, and so are fires and floods and pestilences and similar ill-winds which blow good to the enterprising pressman and harm to everybody else. Nevertheless, bright mementos of scenes at tourist places are worth taking to keep in stock, for in summer an editor is occasionally inspired to run a page of holiday pictures—and yours may be one of them. Herewith reproduced is a little snap of my own of an Isle of Man regatta, which was used, with other similar snaps of that gay resort, in a weekly called the "Black and White Budget," and duly paid for.

As you see, it is the sort of picture which anybody can take any summer; and it may comfort some aspirants to learn that it is only quarter-plate size, and was obtained with a decidedly cheap and nasty little box camera. I cannot honestly say that I think this picture will ever appear in print again; but even the one appearance made it "worth while."

Seaside and pleasure-resort scenes, then, have some remote chance of sale. I do not speak very enthusiastically, because the chance is not a big one. However, beach scenes, with children paddling, bathers, and so forth, are in some demand by postcard publishers, and though the prices paid by these gentlemen are rarely munificent, they are not to be despised as a side-line. Vivacious scenes of this species, too, appeal to ladies' papers, for use as cover designs, tail pieces, decorations, and the like, and often take prizes



Revenge Beyond the Tomb (see page 532).



The Venetian black Maria.

in competitions. At the moment of writing, "Country Life" is offering prizes for these very subjects; and its photographic competitions are worthy of attention, for this paper pays ten and six for the right to reproduce even unsuccessful competing prints—a practice not followed by all magazines.

Some photographers seem to think that if they travel abroad they are sure to obtain pictures suitable for reproduction in the press. This is not so, however. The English press is, to begin with, extremely insular in its interests; its editors want a hundred English subjects to one foreign subject. Moreover, views of the Continent are easy to obtain at a moment's notice in dozens of shops in London; and editors know this, and consequently do not rely on the roving amateur. Views which are hackneyed are sure to be in stock in the said shops, and therefore need not be taken by the Cook's tripper except for his own amusement: he is very unlikely to sell them to any editor. But he should be on the look-out for views which the professional would miss, or whose value the professional would probably fail to gauge.

Here is a case in point. In Venice—which is as "overdone" as it is lovely—I was standing one day on the Schiavoni, when I noticed a queer gondola come under the Bridge of Sighs and draw up opposite the prison thereby. The compartment of this gondola, instead of being open, so that the passenger could see out, was shut up, and its small window was barred with iron. It at once occurred to me that this was a police gondola—a fact which I afterwards ascertained definitely. I snapped one of these gondolas moored outside the prison, and in due course submitted it, under the title "The Venetian Black Maria," to the "Wide World Magazine," which accepted it.

Now it is improbable to the last degree that this magazine would have accepted even the finest view of the Grand Canal or of St. Mark's Cathedral. The public have seen pictures of suchlike scenes in Venice thousands of times, and do not want to see any more. But this Venetian Black Maria was a novelty, or at least a novel version of the twentieth century side of Venice as opposed to its merely historical side. Moreover, a Black Maria is a thing which even the stupidest insular and untravelled intellect can appreciate and understand (!), and inferentially is, on the face of it, more

“popular” than, say, a photograph of a Venetian ceremony of some sort would have been—a ceremony only taking place in Venice, I mean.

In short, the photographer holiday-making on the Continent must watch for “curiosities” just as keenly as he



Castletown Regatta.

watches for them in England. The mere foreignness of his photographs will not sell them to the press; indeed, their foreignness may actually be a disadvantage to them in the editorial opinion. Guide books sometimes allude to some local curiosity, but as a rule the guide-book curiosity is known to the world already, and valueless in consequence. The

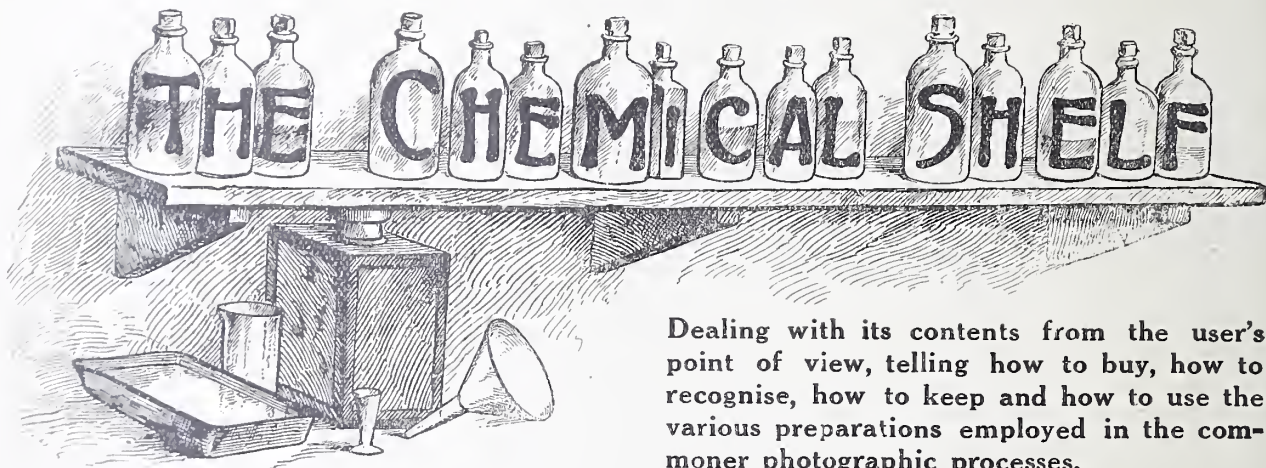
native is the informant to consult, or the hotel porter, or mine host himself.

A third picture accompanying these notes represents a statue in the famous Campo Santo (cemetery) at Genoa. Uninteresting? Yes—and so are all the other memorials in the Campo Santo. Nevertheless I have sold this photograph to more than one paper, because I happened to hear the odd history of its subject.

The statue represents an old woman—a kerbstone fruit and chestnut seller, of Genoa—who was known to have amassed a small fortune. A young man with covetous designs on the fortune proposed to her, and married her. When she died it was found that she had made a will stating that she had seen through his plan, and therefore desired that every penny of her money should be spent on the commissioning of a sculptor and the erection of an unidealised portrait-statue of herself, with an inscription in the patois which she spoke, setting forth her story and her *post mortem* revenge. The husband thus got nothing, and was moreover held up as an example to similar rogues and as a warning to sentimental spinsters with bank accounts.

The snap shot is not good enough to show the inscription, and even if it were few could translate it. Nevertheless, accompanied by an explanatory paragraph, this picture sold, as I say. Why? Because, again, it was of human interest and understandable by all. The Genoa cemetery is crammed with statues, but as far as I was concerned none were worth photographing but this one, for this one was a curiosity with a “story,” and all the others were “mere works of Art.”

But broadly speaking, if press photography is your ambition, you had better take your holiday at home rather than across the Channel. Even if you are lucky (?) enough to be with your camera in a railway accident in Switzerland, you will not sell a picture of it so readily as if you were in one at Swindon.



PLATINUM CHLORIDE.

Platinum chloride, also known as platonic chloride, or chloride of platinum, is a dark-brown crystalline salt, generally supplied sealed up in glass tubes in the same way as gold chloride. As it is a costly substance it should be obtained from a reliable source, that its purity may be assumed. It is very soluble in water, and is best kept in the form of a solution of a strength of one grain of the salt to one dram of water. Platinum chloride keeps very well in solution, and in the sealed tubes lasts quite indefinitely.

All platinum salts are highly poisonous, a fact which is not generally recognised by those who use them. They may affect the skin if it is kept in contact with them for any length of time. The amateur who pays reasonable regard to cleanliness, and uses a nailbrush after his photographic operations will have nothing to fear.

Platinum chloride used to be employed for the platinum toning of prints and lantern slides, to which it gives a colour closely resembling that of true sepia. Unfortunately, the pro-

cess of toning with it reduces the vigour of the print very greatly, so that unless it is exceptionally dense to start with the final result is not a success. In consequence of this, platinum chloride has been largely replaced by potassium chloroplatinite as a toning agent, as the latter is free from this defect. The formula given below is Haddon's, and except for its reducing action, which may be allowed for, gives very pleasant sepia tones on matt P.O.P. On the other hand, the colours obtained in platinum toning are not very suitable for glossy P.O.P.

FORMULA.

Platinum chloride	...	...	...	1 grain
Sodium formate	...	...	...	30 grains
Formic acid	...	...	...	10 minims
Water to	...	...	...	12 ounces

The prints are washed before toning in the usual way. After toning they are rinsed well and fixed in plain hypo to which a little bicarbonate of soda has been added, to neutralise any acid the prints might bring into the bath.

CHATS WITH A BEGINNER

ON THE MOVEMENTS OF A CAMERA.

VI.—The Plate Holder.

By E. LLOYD.

THE plate holder can hardly be described as a "movement" of a camera, yet a consideration of the different methods of carrying the sensitive plate falls very naturally into place in such a series as this. For the present, only cameras for plates will be considered, films demanding separate treatment.

The simplest way of carrying plates is in dark slides. Dark slides are shallow flat boxes, holding either one or two plates ("single" or "double" slides), and made either of cardboard, wood, or metal. Cardboard slides are only found in the cheapest of cheap cameras, and although perfectly good work may be done with such outfits, their extremely flimsy nature makes them actually most expensive. Many dark slides in use to-day are made of metal. If well made and properly taken care of, metal slides are excellent pieces of apparatus. They are light, extremely compact, and handy. On the other hand, a blow or a strain which would not affect a wooden slide may make a metal one useless. Inferior metal slides are often anything but light-tight. Metal dark slides are usually single ones.

Wooden dark slides are of two kinds—"solid" and "book form." The latter are generally supplied with the more costly cameras, although one or two of the best make are fitted with a very satisfactory form of solid slide. With solid slides the shutters usually draw right out to expose the plate. When this is the case, the slit through which the shutter passes must be provided by the maker with what is called a light trap. This is an arrangement of a thin tongue of some material, which, as soon as the shutter is drawn out, closes the opening entirely, which otherwise would let in light and fog the plate. This light trap is generally the weak part of solid slides, and its efficiency should be looked to, or a valued negative may be spoilt from light fog. As the shutter is replaced, it opens the light trap and slides past it. Hence arises the necessity for care in putting back such shutters, to see that they enter the light trap fair and square. If they do not, the corner of the shutter which is inserted first may open the light trap all along, and so fog the plate. The shutters of these slides are often of different appearance on the two sides. When this is the case, by making it an invariable rule always to have the shutters with the same side outwards when the slide is loaded, and always to put them back the other way round after exposure, double exposure is guarded against, and one can see by merely glancing at the dark slides which of them contain exposed and which unexposed plates.

Double dark slides of book form are the most costly slides to purchase, but if well made are very lasting, and are certainly the most convenient to use. The two halves open like the leaves of a book for filling or emptying; hence the name. There is a thin partition between the plates, which in the best slides is hinged at one end. The plate which is enclosed when the partition is in place and fastened down, should be the one corresponding to the even number on the outside of the slide. On opening the slide in the dark room, therefore, the more accessible plate corresponds to the odd or lower number, which presumably was the first to be exposed.

Book form double dark slides have their shutters hinged so as to fold over the slide or camera instead of being drawn right out. The hinges are generally of cloth or leather, very rarely of metal. Some of the fabric that is used for this purpose has an injurious action on plates that are left near it for any length of time. A band of fog makes its appearance on development, which will be found to correspond in size and position with the fabric on the shutter. As slides are required at times to hold plates unaffected for a considerable period, a slide which acts in this way should be sent back to its makers. At the same time, it is a good practice never to leave plates in dark slides longer than is necessary, returning them to their boxes to await either exposure or development. If they do not actually fog when left for some days in the slide, at least they stand a great chance of accumulating dust.

Metal slides are usually supplied in a little case holding several. Wooden slides should be provided with bags, both to protect the slide from scratches and injury, and to act as an additional safeguard against the entrance of light. Such bags can be bought or may be home-made.

There are two very convenient forms of slide, which allow a large number of plates to be carried in a very small space. These are known as the Mackenzie-Wishart slide and the Houghton Envelope. The root idea is the same in both. The plate is carried in a special form of light-tight envelope, in which it is inserted into the slide. Drawing the shutter of the slide uncovers the plate; closing it protects it again. Both are thoroughly practical, but in each case the user must remember that he is not employing anything as substantial as a wooden or metal slide, and must take steps to see that the plate envelopes are not injured.

For plates not larger than half-plate, changing boxes are sometimes used instead of dark slides. The best known of these is the N. and G. Changing Box, made by Messrs. Newman and Guardia. In this the plates are carried in sheaths, the box holding twelve plates (or twenty-four cut films). A lever at the back of the box raises the sheath and plate into a leather bag on the top of the box, and the sheath can then be caught hold of and inserted into the front of the box for exposure. The merit of changing boxes is compactness, since they take up much less room than a corresponding number of dark slides. They have the drawbacks, however, that, should any part of the mechanism jam, all photography is stopped until it is put right, and that the plates must be exposed in the order in which they are put into the box. It is therefore inconvenient with a changing box to carry one or two plates of a special kind for some special purpose. The boxes also often will not work properly unless they contain the full number of plates.

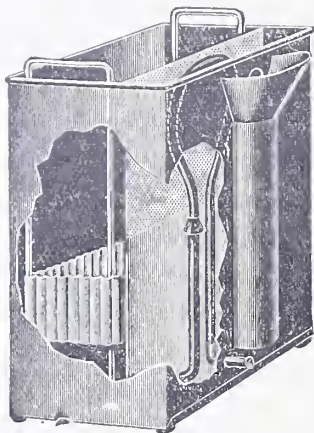
The last form of plate holder is that in which the camera itself contains the plates—the magazine camera. The most popular form, in which the plates are carried in sheaths with pins, on which after exposure they are swung over from a vertical to a horizontal position, is efficient if well made to start with, and if handled properly and with due care. Roughly treated, it goes out of action sooner than almost any form of plate-holding device. It has the merits of being simple to use and simple and not costly to construct.

REVIEWS

Butcher's Scientific Plate and Print Washer.

THE washer which is figured in the illustration below constitutes, in our opinion, a very decided advance in apparatus for automatically washing plates or prints. It is known as the Scientific Plate and Print Washer, is patented, and is brought out by Messrs. W. Butcher and Sons, Ltd., of Camera House, Farringdon Avenue, London, E.C., price 3s. 9d. Although at the first glance at our illustration the washer may seem to be much the same as many of its predecessors, it is essentially different, and as the difference tells decidedly in favour of efficiency, a little attention may well be given to its design and method of working.

The washer consists of a main tank or reservoir, in which are placed the plates in a rack, or prints. Alongside this is another vessel, separated from the first by a partition, which is solid until about half the total height of the washer is reached, and is freely perforated above. The washer, it should be noted, is twice the ordinary height, so that these perforations only commence *above* the level of the top of the plates as they stand in their rack in the main tank. The main tank is provided with a syphon, which comes into action and empties it automatically as soon as the water reaches the top of the washer. When half empty an air-hole is uncovered, which puts the syphon out of action again until the washer has refilled. Outside the second vessel, communicating with it at the bottom, is a tube with a funnel mouth, by which the washer is supplied with water, the funnel being placed under the tap.



The way in which it works is this. The plates being placed in the tank, and the funnel put under the tap, the water supply is turned on. The outer vessel fills until the level of the water reaches the perforations, when it overflows into the main tank and so quickly covers the plates. When the main tank is also filled up to the level of the perforations the plates are completely covered. The water continues to rise, however, but owing to the fact that the stream only runs into the outer vessel through the funnel and tube, it rises very gently in the main tank, the plates practically being left soaking undisturbed while the height of the water above them gently increases. When the water reaches the top, the syphon starts and removes this water in which the plates have been soaking undisturbed, the bulk of water above gradually descending to take its place. The syphon does not go out of action until the whole of that water, containing the hypo it has extracted from the plates, has been removed. The water then gradually rises again, and the process is repeated until the plates are thoroughly washed. One of its characteristics is, therefore, that it must be left quite undisturbed.

It must not be supposed that this is mere theory. To prove that it actually did what was claimed for it, Messrs. Butcher sent us with the washer a supply of black dye, and asked us to add some of this to the water in the main tank, to represent the hypo-laden liquid, and to note the rapidity with which the dye was removed. This is an old dodge for testing the efficiency of washers, and an excellent one. We tried it, and can only say that we were astonished at the speed and thoroughness with which the washer worked. The principle on which it is based is a sound one, and in practice it is as efficient as it is possible to conceive.

We are great believers in thorough washing, and in the main wash both plates and prints by hand; but we should place implicit confidence in the absence of any appreciable trace of hypo in negatives which had been washed for half an hour in the Scientific washer. Yet it wants no attention at all during that time, and is quite without anything to get out of order. At its price (3s. 9d.), when we consider what it does and how well it does it, it is absurdly cheap, for it is not only cleverly designed but is substantially made.

Fallowfield's Christmas and New Year's Card Mounts.

THE firm of Jonathan Fallowfield, of 146, Charing Cross Road, London, W.C., have sent us a large collection of samples of mounts which they are putting on the market for Christmas and New Year's cards. To judge from these, which only represent a few of the many which they stock, the assortment is a very varied one. Amongst them will be found cards to suit all pockets and all tastes, to accommodate alike those who paste-on and those who slip in.

One of the designs which we note is known as No. 273. This is a folded mount, of ivory white card, with an embossed design, ivy, in green and gold, with the word

"Greeting" outside, while within is "With all good wishes" and a place for the name. Contrary to the general practice, the space for the photograph in this pattern is outside, on the front, which is arranged to take a small oval picture, slip-in fashion. This, to our thinking, makes a most attractive little card, and one that is in perfectly good taste. The linen surfaced mounts seem to be in great favour this year, and quite a number in Messrs. Fallowfield's collection of samples are made of this very suitable material. Anyone thinking of using mounted photographs this year to convey his seasonable greetings can hardly do better than inspect the stock which Messrs. Fallowfield hold.

Correspondence.

The Editor is not responsible for the opinion of his correspondents.

ELLIPTICAL REFLECTORS FOR ENLARGING.

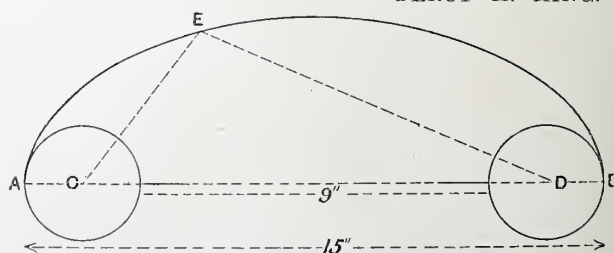
Sir, In *Photography and Focus* a few weeks ago a correspondent (R. C. Sibley) enquires how to strike an ellipse for enlarging purposes. My enlarging lantern, half-plate, was made according to the diagram given below, and is quite efficient, although entirely home made.

The base line A B was taken, 15in. long, and two circles each 3in. in diameter were struck, 1½in. from each end. Two pins were stuck, one at A and one at B, and a piece of thin string tied to them so as to be tightly stretched from one to the other. The pin at A was then shifted to C, and that at B to D, and the ellipse described with a pencil, in the ordinary way, keeping the string tight all the time. The position of the string at one point is shown by the dotted

lines C D E. The reflector should be made of metal and painted dead white. The lights occupy the positions C and D. In my case I use two incandescent gas lights, one on each side. Trusting that this may be of use to your correspondent,

Yours, etc.,

PERCY H. KING.



Queries & Replies

REGULATIONS.—(1) Envelopes must be marked "Query," and the "Enquiry Coupon" found elsewhere must be enclosed. (2) The full name and address in addition to a *nom-de-plume* must be given. (3) Only one question on one subject is allowed in each letter. (4) Prints may be sent for criticism, but a separate coupon must be sent with each print, and a stamped addressed envelope (not loose stamps) for their return.

E. DU BOULAY (Ryde).—We have sent your letter on.

T. J. HAYTON (Whitley Bay).—Many thanks for the interesting little print.

D. W. MOSS (Manchester).—None is at present arranged; but if we do have one you may be sure that it will be duly announced in our columns.

CARTRIDGE (Streatham).—We found no difficulty whatever in using it with carbon tissue, and M. Demachy recommends something very similar for oil printing. See rule 3 above.

GEO. STREET (Edinburgh).—In your case we should certainly get No. 3, which, situated as you are, would certainly give you the better value, allowing you to use the excellent instrument you now have.

ELECTRIC LIGHT (Wentworth).—It would certainly be better to purchase an accumulator. It is anything but economical to run an incandescent lamp from batteries, if it is required to give an effective light.

CHEMICUS (Cricklewood).—We prefer to use the solution freshly made; but it may be applied to the prints at any time after they have been fixed and washed, and is serviceable both for bromide and gaslight prints.

VIENNA (Burnley).—The reason the eyes look closed is that the photograph was not sharply focussed, so that all detail under the eyebrows is lost. The strong top light, casting a shadow over the eyes, helps the effect.

RUSTICS (Warrington).—The card seems to have been lightly toned in the ordinary way. Your best plan will be to use the formula given by the maker of the paper, taking care to have negatives with sufficient contrast, not to print too deeply, and not to overtone.

DURABLE (Northallerton).—Gaslight prints, properly made and stored, should keep unaltered for a very great many years; but they can hardly be said to be as permanent as platinum prints. We do not see why they should not answer your purpose fully, however.

H. BENTLEY (Knottingley).—Intensifying with mercury would be most likely to do what you require; but we should advise you to try and get the best enlargement you can before intensifying, as a negative which is too thin to give a good print will often give a very good enlargement.

H. H. DAYMOND (Bootle).—Many thanks for the print. We have returned the other. The cause of the marking is beyond us. It might possibly be due to inferior paper, but it would be hard to prove that it was so; as there are other things that might equally well give rise to them. Dirty dishes, for example.

GEORGE (Carrington).—If your present lens has insufficient depth of focus for your work you would gain nothing by purchasing a lens which would work at a larger aperture, since the larger the aperture at which it worked the less would be its depth of focus. Are you sure that it is want of depth of focus that is troubling you?

SNAPDRAGON (Watford).—We have returned the print, and could judge better from the negative. It does not look as if it was wrongly exposed, but rather suggests insufficient development. In which case intensification with mercury and ammonia should improve it. But if you will send the negative we shall be in a better position to advise.

N. WEBB (Calne).—It may be the spot, but we do not think it likely, and should suspect light fog rather. It does not sound like flare either, which would not be in the same place on every plate, but would most likely vary its position according to the position of the brightest part of the image. We should try turning the lens half way round in its mount, so as to bring the spot to the top instead of the bottom. If this causes the fog to shift you will then know that the lens is at fault.

P. H. JONES (Annan).—The coupon marked "Prize Competition" is the coupon for any or all of our competitions. Postcards are "eligible" in the advanced workers' competition, but it is not very likely that a competitor who sacrificed all the advantages of effective mounting would stand much chance. Our publishers ask us to request you to send them a line stating the name of the newsgent from whom you get the paper, and they will take up the subject of its delay in its delivery.

J. H. PHELPS (Crouch Hill).—We have posted your letter. That is all the address we have.

E.E.E. (Lochwinnoch).—If the cutting off really does not matter, then we should recommend the No. 3.

W. H. PRESTON (Blackburn).—Such a series appeared in *Photography* for February 12th, February 19th, and March 5th, 1907. We can trace no other.

P.T. (Soho).—The marks are in the negatives and are caused by the films being allowed to lie one on top of another during development or else during fixing. Either would cause it.

A. E. AYLIFFE (Horeham Road).—The Autotype Co., 72, New Oxford Street, London, W.C., is the most likely firm. We have no idea where powdered egg shell can be obtained commercially.

PROJECTOR (Accrington).—A contributor speaks very highly of projection by means of the "Nernst" projector lamp, but we ourselves have had no experience of it. In your case it seems to be that or nothing, as we know of no other that would answer your requirements.

REFLEX (Chester).—Owing to lowness of price there must be very many more magazine cameras than reflexes sold; but amongst the higher priced instruments the reflex has quite out-distanced all others in popularity of late, and we see no reason why it should not continue to do so.

F.N.T. (St. James's, S.W.).—The details differ considerably with different makes of the paper. It would be best to get the instructions of the maker whose paper you are using. If you have not got any yet, Mr. J. R. Gotz, of 215, Shaftesbury Avenue, London, W.C., will supply a reliable make with full instructions for its use.

W. J. CHAPMAN (Stawell, Australia).—Many thanks for your letter; we are very glad to learn that *Photography* and *Focus* is so useful to its Australian readers also. The monthly competitions as they run on are open to readers all over the globe; the coupon in the issue which is the current one at the time of sending where the competitor lives is always accepted by us in the case of readers abroad.

G. REID (Hurlford).—Thanks for your letter and suggestions, which we note. We may perhaps reproduce some, but it is very doubtful if we could do it so as to give any idea of the direction in which other competitors could improve their work. The winning pictures will no doubt be those which would have taken first awards had they been prints instead of slides, we cannot say more.

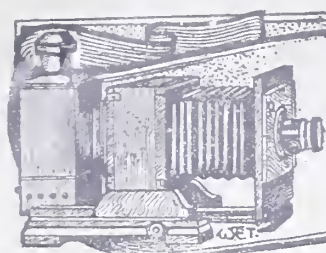
R. OPLING (Banbury).—We have sent your print back. There would be no harm in trying the formula you mention. But if the spots are due to damp during printing, which we suspect, but which you do not state, it would be no good. You might in such case try placing the negative in an ordinary combined toning and fixing bath. If this will not remove them in an hour they are incurable.

PUSS (Bournemouth).—Yes, in the dark room. Exposure must be found by trial, it will be from five seconds to fifty to a candle at a distance of ten feet. It is better to use both plates backed, and to use slow plates. Exposures would be probably about one-tenth that of bromide paper, but it must be found by trial. You would do well to read the article in *Photography* for May 21st, 1907, which our publishers could send you, we expect.

H. SWIFT (Brighton).—The formula of the "Beach" developer is given below. It is a very efficient one, but is now quite obsolete, being supplanted by simpler formulæ which are just as effective:

A. Sodium sulphite	4 ounces
Warm water	4 ounces
when cooled to 70° Fahr., the following are added:	
Sulphurous acid (strongest obtainable) ...	3½ ounces
Pyro	1 ounce
B. Potassium carbonate (crystalline) ...	3 ounces
Water	4 ounces
Sodium sulphite	2 ounces
Water	4 ounces

These two solutions are made up separately and then mixed together to form B. The developer is made by taking for each ounce half a dram of A, half a dram of B, and diluting to make one ounce. Less or more of B may be used if preferred.



Copying by Means of an Enlarging Lantern.

By W. M. (An Amateur). Special to "Photography and Focus."

PHOTOGRAPHS, prints, etc., may be copied by means of an enlarging lantern in the manner described below, which will be found very simple in practice. Much of the difficulty of focussing, exposing, and lighting is eliminated in this method, which will therefore no doubt appeal to many amateurs.

A dry plate is exposed momentarily to the light, and is then developed, fixed, washed, and dried. Any old negative may be used in place of it, if preferred. The plate is then ruled with parallel lines at right angles to each other, the lines being about a sixteenth of an inch apart, and a fine needle being used for the ruling. The lines which are about half an inch apart are re-ruled with a thicker needle. This plate forms the focussing screen, and should be placed in the carrier and inserted in the lighted lantern, with the ruled film facing the lens.

The photograph that is to be copied is fastened to the wall or to a vertical drawing-board, and the lantern is racked out until bright lines from the ruled screen appear sharply in focus on the photograph. The smaller the image of the focussing screen on the photograph, the larger will be the scale of the copied negative. At this stage, by gradually stopping down, the exact stop which gives a sharp image over the whole negative may be ascertained. When the bright lines are sharp from end to end on the photograph, the stop that is in position is the one to use.

The light of the lantern is then extinguished, and the room is darkened, and a dry plate is inserted in the carrier instead of the focussing screen. It is a good plan to place a sheet

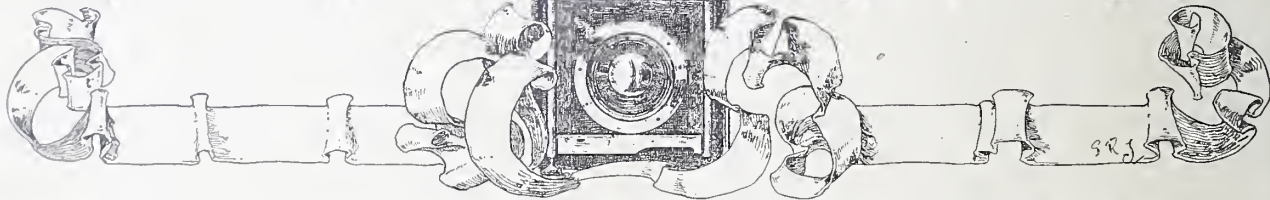
of black paper on the back of the dry plate to prevent any reflection from the interior of the lantern from affecting the plate. The carrier containing the plate is inserted, and the whole lamp is carefully covered up with a cloth, leaving only the lens exposed.

The exposure is then made, by burning a few inches of magnesium ribbon on each side of the lens. The ribbon should be held by means of a small clip, and moved whilst burning, traversing a space equal to the length of the photograph being copied. Each piece of ribbon is burned separately, lighting it by means of a match. Care must be taken not to shake the lantern in passing from one side to the other between the exposures. The ribbon is moved and burnt on both sides of the lantern in order to secure even lighting and so to do away with grain—a fault so common in copies. It may be well to add here that I use three inches of ribbon on each side in order to copy a full postcard on to a quarter-plate, using f/16. The bigger the stop, of course, the less ribbon is required. The plate is then taken out and developed.

A few "don'ts" may be added:

1. If the photograph has a glossy surface, the ribbon should be burned as directed, but should be held about a foot from the lens on each side. Otherwise the flare of the ribbon may be reflected by the shiny surface of the print, and so cause failure.
2. Don't let the lighted match or ribbon come in front of the lens.
3. Don't allow the focussing screen or the dry plate to have any play whatever in the carrier.

PRACTICAL PARAGRAPHS



VERY FINE GRAIN FOCUSSING SCREENS. A fine focussing screen can be made by taking an undeveloped dry plate, fixing it out, washing, and drying it. It is then placed for half an hour in a five per cent. solution of barium chloride, is rinsed for half a minute under the tap, and placed in a saturated solution of ordinary alum. This causes a very fine precipitate of white barium sulphide to be formed in the film, which, when the plate is dry, will give it an opalescent appearance. The plate is well washed after the alum bath, and then dried. It may be varnished as an additional protection.

* * *

A DAMP WEATHER HINT. If the camera is used to photograph in the rain, and is then packed up and put away, the chances are that when it is next wanted for use, the damp will have caused the wood to swell, and one or more of the movements will be unusable. To avoid this, when getting back home, the camera should be set up and the front racked out, and it should be left in this condition in a warm room until the next day. It can then be put away without any fear of sticking.

MEASURING THE FOCUS OF A NEGATIVE LENS. While most photographers know how to ascertain the focus of a positive lens or magnifying glass with sufficient accuracy for their purpose, it may not be so generally known that the focus of a negative lens, such as is used in telephotography, can be ascertained almost as easily. If we hold such a lens in the path of a beam of sunlight, instead of bringing the rays to a focus it causes them to diverge, as can be seen by holding a piece of white card where it will receive them. A circular disc of light will appear on the card, and when the latter is held at such a distance from the negative lens that the diameter of the disc is twice the diameter of the lens itself, the distance from the card to the lens is the focus of the lens. If the negative can be fitted in the camera, all that is necessary is to ascertain the diameter of the clear opening of the lens and to draw a circle on the ground-glass of twice that diameter. The camera is then turned towards the sun, and racked in or out until the circle of light and that drawn on the glass coincide. The distance of the ground-glass from the lens is then measured. The same method can be adopted without a camera by fitting the negative lens over a hole in a sheet of card, and describing on another card a circle of twice the diameter of the hole.



THE SCHOOLROOM, MORNING.

The original of this picture was No. 216 at the Exhibition of the Royal Photographic Society.

BY ERNEST G. BOON.



THE TRAWLER.

BY THOMPSON CARR.

The original of this picture was No. 23 at the Exhibition of the Royal Photographic Society.

Imperial Plates

ORTHO S.S. ORTHO S.R.

H. & D. SPEED 275.

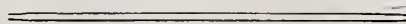
H. & D. SPEED 200.

ORTHO N.F.

H. & D. SPEED 175.

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Autumnal Tints.



Imperial P.O.P

UNRIVALLED IN BRILLIANCY, WEALTH OF DETAIL,
AND DELICACY OF TONES.

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Twelve Months...	6 6	Twelve Months	10 0
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Three Months....	1 8	Three Months..	2 9
Single Copy....	1½	Single Copy....	2½

REMITTANCES.—Postal Orders, Cheques, etc.,
should be crossed and made payable to ILIFFE
AND SONS LIMITED.

ADVERTISEMENTS.—All communications on
advertisement matters should be addressed to:
The Advertisement Manager, PHOTOGRAPHY AND
Focus, 20, Tudor Street, London, E.C. All copy
for displayed advertisements for the issue of any
particular week must reach Tudor Street by the
first post on Monday morning in the week previous.

PREPAID ADVERTISEMENTS.

SALE AND EXCHANGE (for Amateurs only).
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All advertisements to be inserted on these terms
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BOX NUMBERS.—For the convenience of
advertisers, letters may be addressed to numbers
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stamped and addressed envelopes must be sent
for forwarding replies. Only the number will
appear in the advertisement. Replies should be
addressed: "No. 000, c/o PHOTOGRAPHY AND
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DEPOSIT SYSTEM.—Persons who hesitate to
send money to unknown persons may deal in
perfect safety by availing themselves of our
Deposit System. If the money be deposited with
PHOTOGRAPHY AND Focus, both parties are advised
of this receipt, and upon intimation of the arrival
and acceptance of the goods, the money is for-
warded, less a charge of 1/- for registration. The
time allowed for a decision after receipt of the
goods is three days. For all transactions exceeding
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EDITORIAL NOTICES.

ADDRESS.—All communications for the Editor
should be addressed: The Editor, PHOTOGRAPHY
AND Focus, 20, Tudor Street, London, E.C.

TO CONTRIBUTORS.—The Editor will be glad
to consider original up-to-date manuscripts on
photographic subjects. All contributions must be
typewritten, or in very legible handwriting, on
one side of the paper only, and should bear the
name and address of the sender. Letters or com-
munications arising out of matters already appear-
ing in the paper are not paid for. The Editor
disclaims legal responsibility for the safety of
matter submitted to him, but he will endeavour
to return rejected manuscripts, etc., when a
stamped addressed envelope is enclosed for that
purpose. No notice whatever can be paid to
communications without the name and address of
the sender, nor necessarily for publication.

PRINTS FOR CRITICISM.—Readers sending
prints for criticism or advice are notified that in
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mission is given for their reproduction, without
fee, in PHOTOGRAPHY AND Focus.

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sider for publication, with or without letterpress,
photographs of special interest, on terms to be
arranged.

PAYMENTS.—Articles and illustrations are paid
for on acceptance.

INTERVIEWS.—The Editor will be at 20,
Tudor Street, on Wednesdays, between the hours
of 9.30 and 11.30 a.m., but can only be seen at
other times by appointment.



A ONE-MAN SHOW of the work of Mr.
J. M. Whitehead is now on the walls
of the rooms of the Glasgow Southern
Photographic Association, at 169, Eglinton
Street.

THE GREETING SERIES of the Lily-
white postcards is now ready. Designs
will be sent free on application to the
Halifax Photographic Company, Halifax,
Yorks.

HARTLEPOOLS PHOTOGRAPHIC SOCIETY.
The honorary secretary is now Mr. A.
S. Foxall, of Elm Grove, West Hartle-
pool, vice Mr. J. J. Rutherford,
resigned.

THE PRIMUS LANTERNISTS' POCKET
BOOK, which is issued annually by
Messrs. W. Butcher and Sons, Ltd.,
of Camera House, Farringdon Avenue,
London, E.C., price 6d., has just made
its appearance for 1908-9. It has been
thoroughly revised and brought up to
date, and is indispensable to lantern-
ists, containing, as it does, not only a
diary from October 1st, 1908, to October
2nd, 1909, but a host of useful infor-
mation on lantern matters, tables, etc.,
together with a directory of dealers in
lanterns and apparatus.

Books for Photographers. .

Science and Practice of Photography.

By CHAPMAN JONES, F.I.C., F.C.A., F.R.P.S.
Price 5/- net. Post free 5/4.

Instruction in Photography.

By SIR WILLIAM ABNEY, K.C.B.
Price 7/6 net. Post free 7/10.

Practical Orthochromatic Photography.

By ARTHUR PAYNE, F.C.S.
Price 1/- net. Post free 1/2.

Successful Negative Making.

(Illustrated.) By T. THORNE BAKER, F.C.S.
F.R.P.S.
Price 6d. net. Post free 7d.

All About Enlarging.

(Illustrated.) By C. WINTHORPE SOMERVILLE,
F.R.P.S.
Price 6d. net. Post free 7d.

Photography Made Easy.

(Illustrated.) By QUI-VIVE.
Price 6d. net. Post free 7d.

Lantern-slide Making and Exhibiting.

(Illustrated.) By JOHN A. HODGES, F.R.P.S.
Price 6d. net. Post free 7d.

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THE DUNCAN RESEARCH LABORATORY
has been opened at 39, Bradley Gar-
dens, West Ealing, London, W., by
Mr. F. Martin Duncan, for photo-
graphy applied to biology and physical
research.

THE BOLTON AMATEUR PHOTOGRAPHIC
Society holds its exhibition for four
days, commencing December 9th.
Particulars can be obtained from the
exhibition secretaries, at 25, Croston
Street, Bolton.

"SECOND-HAND AND SHOP SOILED
APPARATUS" forms the subject of a
fifty-six page catalogue which has just
been issued by the Westminster Photo-
graphic Exchange, Ltd., of 119,
Victoria Street, London, S.W. It con-
tains a great many very cheap lines.

A FRAME FOR POSTCARD or other
photographs of a novel design has been
submitted to us by the Mount Cutting
Company, of 12, Harp Alley, Farring-
don Street, London, E.C. The frame
itself is in a neat design of white
enamel, well made, and provided with
a cut-out mount to take ten cards. The
size of the frame is 24in. by 18in. The
advantages claimed for it are that un-
mounted prints can be put in it and
shown as mounted and framed within
a very few minutes, without the use
of any adhesive, and that they can be
taken out and others substituted as
easily, just as may be required.

PHOTOMICROGRAPHY. Demonstrating
this before the Hull Photographic
Society, Dr. Hollingsworth said that
in addition to the microscope all that
was wanted was an arrangement to
take the tube of the instrument at one
end, the eyepiece being removed, and
to carry at the other a focussing screen
and afterwards a dark slide. Every-
thing must be as rigid as possible, and
all must be arranged in one straight
line from the illuminant at one end to
the centre of the plate and screen at
the other. He used an inverted in-
candescent burner as the illuminant,
and said backed plates should be used
in all cases—he preferred slow isochro-
matics.

CARBON PRINTING was demonstrated
before the Chiswick Camera Club by
Messrs. Coysh and Hopkins, when the
former said that placed in a calcium
storage tube, such as was used for
platinum paper, the tissue in a sensi-
tized state would keep in good con-
dition for several months. He had
developed tissue that had been printed
and stored in this way for quite a year.
A very effective picture could be made
by first preparing a thin washed-out
looking carbon transparency on clear
glass, placing against the film side of
this a piece of tinted paper, and fram-
ing both together, with a bit of back-
ing board pressed well into contact in
the ordinary way. The effect, especi-
ally with architectural subjects, was
very fine, and could be varied to almost
any extent by the use of papers of
different colours and textures.



Negative taken on a

Wellington

'XTRA SPEEDY
PLATE (Speed 350 H. & D.)

Half-tone from a print on

"WELLINGTON" CARBON BROMIDE.

A SIMPLE WAY WITH GASLIGHT PAPER and plates was described by Mr. J. Clarkson before the Blackpool and Fylde Photographic Society. He exposed by means of magnesium ribbon at a distance of one foot. A round stick, lin. 10 diameter and 1ft. long, is used. It is split at one end, and the ribbon is inserted in the slit; the other end touching the printing frame measures the distance. The diameter of the stick is used to measure the ribbon. By increasing the exposure of Wellington's S.C.P. to five times the normal, and adding 5 minims of a restraining solution (ammonium bromide $\frac{1}{2}$ ounce, ammonium carbonate $\frac{1}{2}$ ounce, water 5 ounces) to [? each ounce of.—Ed.] the normal rodinal developer, Mr. Clarkson said he got prints of a good sepia tone.

x x x x

HYPOTALUM TONING OF P.O.P. A correspondent, Mr. T. E. Moss, of Winsford, writes: "I should like to give a word of warning to those who are using this method. After months of experimenting, I have come to the conclusion that it is important that the quantity of alum does not exceed one part in four hundred, as otherwise the solution acts as a reducer, eating away the details and causing yellowness. The following I have found to be the best formula:

Hypo 5 ounces
Water to 20 "
Alum (5% solution) 1 ounce

This will give as good tones as a gold bath, but is rather slower. Prints do not require washing before toning. It appears to act better after it has been used than at first."

THE CRITERION COMPETITION AWARDS are as follow: First prize (£5 5s.), divided between Chas. Lindsay and W. Cheetham; second prize (£2 2s.), divided between J. Stott and A. Holmes; third prize (£1 1s.), divided between Mrs. C. Keene and C. Eustace. Fifty consolation prizes (5s.) were also awarded.

x x x x

SECOND-HAND CAMERAS. The Tella Camera Co., of 68, High Holborn, London, W.C., has issued a price list of second-hand cameras and of other photographic apparatus at greatly reduced prices, which should certainly be seen by anyone about to purchase.

x x x x

PHOTOGRAPHING HOME INTERIORS. Mr. G. R. Holt Shafto, of Exeter, writes: "I have read with interest Mr. Osgood's article in last week's issue. Perhaps I may be permitted to point out two items where an experimenter under his directions is likely to find trouble. First, the mirror at right angles. If this is tried in any ordinary room there will be numberless undesired reflections in that photograph that will lead to unkind thoughts, I fear. In 'Focus' for April 11th, 1906, I described a simple way of making a reflecting box which will get over these difficulties. The guide as to exposure is not very satisfactory unless care is taken to make the test under ideal conditions for the lighting of the subject. Personally, I can recommend the very simple method of stopping down for detail in the shadows and then exposing according to the table given in the Burroughs-Wellcome Pocketbook."

THE LANCASTER PHOTOGRAPHIC SOCIETY holds its exhibition from November 23rd to 26th inclusive, entries closing November 14th. For entry forms, application can be made to Mr. John Holt, 11, Fern Bank, Lancaster.

x x x x

LANCASTER'S CATALOGUES. Messrs. J. Lancaster and Son, Ltd., of Camera Buildings, 275, Broad Street, Birmingham, have just issued two catalogues—one of optical lanterns and accessories and the other of enlarging apparatus; the latter includes the popular "Ellipsoid" and other patterns.

EMANATIONS FROM AN INCANDESCENT MANTLE.

IT may not be generally known that the ordinary mantle used for incandescent gas lighting gives off radiations which can not only be seen, if they are allowed to fall upon a suitable fluorescent screen, but will affect a sensitive plate. Mr. F. W. Walter, of Kings Lynn, writes us on this subject as follows: "You will perhaps remember that some time back I sent you three photographs of the effects of emanations from the incandescent mantle. Since then I have experimented, and found that the mantle after being used for months still retains the power of giving forth emanations. I have broken up a used mantle into powder, and placed the powder on a thin sheet of metal, and found that the emanations penetrated the metal and left an undoubted impression on a sensitive plate. This was after twenty-one days. The plate was wrapped in brown paper."

Lantern Slide Competition. Awards

THE entries in the lantern slide competition this year were very largely in excess of those on any previous occasion, and the task of judging was more than ordinarily difficult. Every slide entered was projected on the screen, a mixed jet being employed, and the light adjusted to get as far as possible the best effect.

Those slides which were accompanied by stamped labels or wrappers will be returned within a few days. The following is a list of the awards:

CLASS A.—Landscape with Figures (Including Seascape).

SILVER PLAQUE.—"Old Scarborough," W. Baldwin.
BRONZE PLAQUE.—"Treasure Seekers," F. A. Tinker.
BRONZE MEDAL.—"On a Summer Afternoon," F. Lumbers.
CERTIFICATE.—"Chums," L. Yates.

CLASS B.—Landscape without Figures (Including Seascape).

SILVER PLAQUE.—"The First Ice," W. H. Geerkens.
BRONZE PLAQUE.—"Autumn Sunshine," J. J. Hartley.
BRONZE MEDAL.—"The Shadow of the Tree," Rev. H. O. Fenton.
CERTIFICATE.—"When the pond shuts up," C. Brassington.

CLASS C.—Architecture.

SILVER PLAQUE.—"Thro' an Ancient Gate," J. B. Portway, jun.
BRONZE PLAQUE.—"Font, Conway Church," W. E. Parry.
BRONZE PLAQUE.—"Main Entrance at Avery Hill," H. L. Michael.
CERTIFICATE.—"Lies with feet towards the morn," Aubrey G. Raymond.

CLASS D.—Portraits and Figure Subjects.

SILVER PLAQUE.—"A Stranger in the Village," N. Blake.
BRONZE PLAQUE.—"The Dark Room," F. Collins.
BRONZE MEDAL.—"By the Casement Window," Arthur Dolden.
CERTIFICATE.—"Decorating," A. W. Searley.

CLASS E.—Still Life.

SILVER PLAQUE.—"Hops," P. W. Morris.
BRONZE PLAQUE.—"Seed of Common Ragwort," T. G. Hibbert.
BRONZE MEDAL.—"Wayside Flowers, Pinner," A. Woolford.
CERTIFICATE.—"Scabious," J. A. Lovegrove.

CLASS F.—Scientific Subjects.

SILVER PLAQUE.—"Hen Thrush with Food for Young; wild life," Alfred Taylor.
BRONZE PLAQUE.—"The Stump Tuft Fungus," Richard Hancock.
BRONZE MEDAL.—"A Fly's Eye, $\times 400$," J. T. Roberts.
CERTIFICATE.—"Pollen of Hollyhock $\times 90$," Dr. Geo. H. Rodman.

In addition to these slides, a number of others that have been sent into the competition have been purchased for circulation in the set. The circulating collection this year reaches a very high standard of work throughout. Secretaries wishing to borrow the set, which contains ninety slides, should write without loss of time to Messrs. Iliffe & Sons Ltd., Lantern Slide Department, Coventry, giving a list of vacant dates.

VELOX

The ORIGINAL GASLIGHT
PAPER

AND STILL
THE FIRST IN QUALITY.

ART. CARBON. GLOSSY.
PORTRAIT.

FULL OF ARTISTIC POSSIBILITIES.

Vigorous Velox

for weak negatives.

Soft Velox

for strong negatives.

DELICATE MELLOW HIGH LIGHTS.

RICH PURE BLACK SHADOWS.

KODAK LTD.
London, Liverpool & Glasgow

SOLD BY
ALL
DEALERS
and

GRIFFINS,
Kingsway — London.



BEGINNERS' COMPETITION.

Open to all photographers who have never taken an award.

PRIZES.

First Prize.—A signed copy of "The Complete Photographer," a half-guinea work by Mr. Child Bayley, now in its second edition.

Second Prize.—A free subscription to *Photography* and *Focus* for twelve months.

One or more certificates of honourable mention will also be awarded.

RULES.

(1) Each competitor can send as many prints as he likes, but each print must bear on the back the coupon, published each week, the name and address of the sender, the title of the picture, and no other writing whatsoever.

(2) No print will be eligible that is larger than 5½ in. x 3½ in. (postcard size) or 5 in. x 4 in.

(3) No print must be mounted.

(4) No handwork other than simple spotting is permitted on negative or print, nor shading or dodging of any kind. It is distinctly understood that entry in the competition implies a declaration by the competitor that this rule has been complied with; and in case of dispute, the editor shall have the right to call for the negative from which the entry purports to be a simple direct contact print.

(5) No prints will be returned, and no correspondence with regard to the competition can be undertaken.

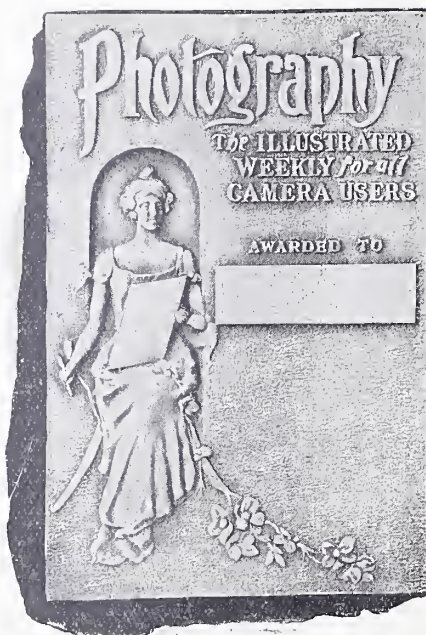
(6) The publishers of *Photography* and *Focus* shall have the right to reproduce, without payment, any of the prints sent in, winning or otherwise. But except the winning prints, the names of competitors of other prints that may be reproduced will not be published without the competitor's consent.

(7) All entries must be addressed "Beginners' Competition," the Editor of *Photography* and *Focus*, 20, Tudor Street, London, E.C., and must be delivered at that address by the first post on the closing date at the very latest.

CLOSING DATE.—Monday, Nov. 30th.



"Photography" Medal. Actual size.



"Photography" Plaque. Actual size.
Weight in silver over three ounces.

ADVANCED WORKERS' PRINT COMPETITION.

PRIZES.

First.—"Photography" Silver Plaque.
Second.—"Photography" Bronze Plaque.
Third.—"Photography" Bronze Medal.
One or more certificates of honourable mention will also be awarded.

RULES.

(1) All photographs must be sent addressed "Advanced Competition," the Editor of *Photography* and *Focus*, 20, Tudor Street, London, E.C., postage paid, to reach there not later than the first post on the closing date, and must contain a stamped addressed envelope or label (not loose stamps) if they are to be returned.

(2) Each photograph must be mounted, but not framed. Prints in slip-in mounts are not eligible. Each must bear on the back the name and address of the sender and the title of the picture. No letters or other communications must be enclosed with the prints. Every print must bear attached to its mount a coupon for the competition of the month, which will be found in each issue of the paper.

(3) Each photograph must be the work of the competitor as regards selection and arrangement of the subject, exposure and development of the negative, and printing, development or toning, and mounting of the print.

(4) The prints which are accompanied by stamped envelopes or labels will be criticised by post, and the editor shall have the right to reproduce any of the prints, winning or otherwise. The awards will be made a fortnight after the closing date.

(5) Awards may be increased or withheld at the absolute discretion of the judge, and in all cases of dispute the decision of the editor will be final.

(6) There is no restriction as to the eligibility, except as set forth in these rules, and except that the same negative must not be used more than once in the competition. That is to say, that a print from it once submitted, all further prints, however varied, are ineligible.

(7) Neither editor nor publishers of *Photography* and *Focus* shall be held in any way responsible for the safety of prints or for their return to the competitors.

(8) The sending of a print to the competition will be regarded as a declaration to the effect that it is eligible under these rules, and that the competitor agrees thereto.

CLOSING DATE.—Monday, Nov. 30th.

SPECIAL SUBJECT COMPETITIONS. OPEN TO ALL READERS.

PRIZES.

First Prize—"Photography" Plaque in Silver.
Second Prize—"Photography" Plaque in Bronze.
Third Prize—"Photography" Medal in Bronze.
One or more certificates will also be awarded.

RULES.

(1) The subject of each photograph entered must be that announced for the particular competition.

(2) Each competitor can send as many prints as he likes, but each print must bear on the back the name and address of the sender, the title of the picture, and no other writing whatsoever. Each print must have attached to it a coupon for the competition of the month, which will be found in each issue of the paper.

(3) No print must be mounted. No handwork other than simple spotting is permitted on negative or print, nor shading or dodging of any kind. It is distinctly understood that entry in the competition implies a declaration by the competitor that this rule has been complied with; and in case of dispute, the editor shall have

the right to call for the original negative from which the entry purports to be a simple direct contact print.

(4) No prints will be returned, and no correspondence with regard to the competition can be undertaken.

(5) The publishers of *Photography* and *Focus* shall have the right to reproduce, without payment, any of the prints sent in, winning or otherwise. But except the winning prints, the names of the senders of other prints that may be reproduced will not be published without the sender's consent.

(6) All entries must be addressed "Special Subject Competition," the Editor of *Photography* and *Focus*, 20, Tudor Street, London, E.C., and must be delivered at that address by the first post on the closing date at the very latest.

SUBJECTS AND CLOSING DATES.

A Domestic Interior. Closes Monday, November 30th.

A subject suitable for use as a Christmas or New Year Card. Closes Thursday, December 31st.

A Winter Landscape. Closes Saturday, Jan. 30th, 1909.

A Portrait by Artificial Light. Closes Saturday, Feb. 27th, 1909.

BUTCHERS' FAMOUS ENLARGERS.

MAXIMUM VALUE AT MINIMUM PRICE.

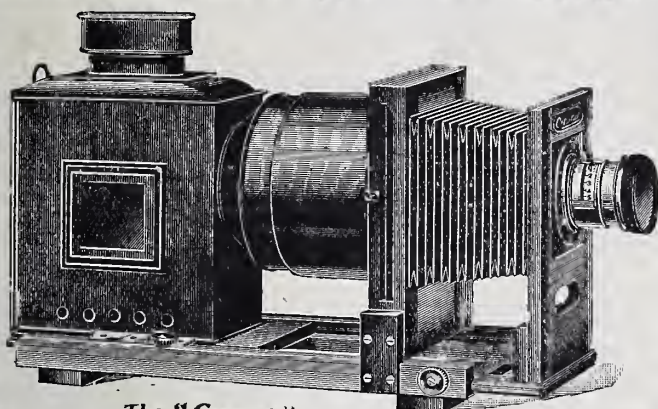
The

'CORONET'

This Enlarger, although inexpensive, is a thoroughly efficient piece of apparatus. The body is Russian Iron of large size, and the base and front Walnut. It is provided with a Reversing Negative Carrier, Sliding Focussing Adjustment, with clamping screw, best quality Condenser, and Achromatic Enlarging Lens in Helicoidal Focussing Mount.

PRICES complete :

$\frac{1}{4}$ -plate,	5 $\frac{1}{2}$ in.	Condenser	£2 12 6
5 by 4,	6 $\frac{1}{2}$ in.	"	3 12 6
Postcard,	6 $\frac{1}{2}$ in.	"	3 12 6
$\frac{1}{4}$ -plate,	8 $\frac{1}{2}$ in.	"	5 5 0
$\frac{1}{4}$ -plate,	11in.	"	13 10 0



The "Coronet."

Do not buy an Enlarger in a hurry. Write for a copy of our free booklet, "How Can I Enlarge," before you make your choice. Remember, our Enlargers are designed by Experts who know what is wanted, and we make them in quantities to produce at advantageous prices. Our Enlargers contain more useful fittings and more useful movements than any other make. If you want to do the best work you must have one of Butchers' Enlargers.

The

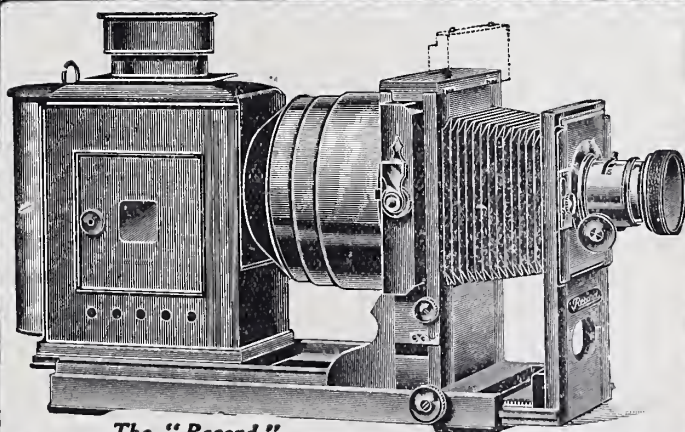
"RECORD"

The most complete Enlarger on the market. Made of the best quality mahogany, with swinging Carrier, Rack and Pinion movement for centring any portion of Negative, Rack and Pinion movement to Carrier Stage for adjusting horizontal position, and Rack and Pinion Focussing Adjustment. The Russian Iron Lamp House has triple extension tubes and light-tight door. Complete, with best quality Lens and Condenser in wood packing case.

PRICES, complete in Stained Wood Case:

$\frac{1}{4}$ -plate	..	£5 15 0
5 by 4	..	7 0 0
$\frac{1}{4}$ -plate	..	9 10 0
$\frac{1}{4}$ -plate	..	18 0 0

Projection Fittings are made for converting the above into Optical Lanterns.



The "Record"

Supplied by all Photographic Dealers.
Manufactured by

W. BUTCHER & SONS, Ltd.,
CAMERA HOUSE, FARRINGDON AVENUE, LONDON, E.C.

PLEASE MENTION "PHOTOGRAPHY" WHEN CORRESPONDING WITH ADVERTISERS.



"The time has come, the Walrus said, to talk of many things."

HERE are still to be found a certain number of persons outside lunatic asylums who cherish the belief that money can be made out of photography. I don't say there may not have been rare instances where a photographer has made an honest profit of a few pence on a job, but as a means of securing a steady income I would sooner back the trade in ancient rags and bones. I have put in a good solid slab of my time at photographic work, but if I could draw up a profit and loss account it would show that so far from making me a millionaire the job has resulted in my learning to be content so long as I can produce with moderate regularity twopence for a twist of shag and a penny for my tram fare home.

* * *

This idea that one has only to practise photography in the right way in order to wallow in wealth is fostered by certain papers, which draw alluring but purely fanciful pictures of lady photographers who make a fortune several times a week, and of gifted amateurs who buy streets of houses with the proceeds of the sale of occasional off-hand snap shots. As to regular press photographers, they are reported to carry home their week's wages in a big sack; which makes it all the more surprising that some of them should still contrive to look as harassed and as seedy as they do. Perhaps they are misers.

* * *

If I had the faintest hope of making money by photography or anything else I should certainly seize two golden opportunities that I wot of. On the face of them they appear like short cuts to untold affluence, but I'm open to bet they are nothing of the kind. If they were highroads to prosperity I should never have heard of them, or else I should have missed them. I lost a chance of making a fortune once when I had an offer of a penny each for as many lantern slides as I liked to make. W. Shakespeare once remarked that there is a tide in the affairs of men that, taken at the flood, leads on to fortune. That was my flood tide, and I missed it, and have been on the rocks ever since.

* * *

One of the golden opportunities to which I have referred is presented to me in a letter from the land of the sausage. It is written in English. At least, that is the evident intention of the writer. I feel inclined to reply to it, but am faced at the outset with a difficulty. At the top of the communication is a printed notice, "Letters preferred in English. On est prié d'écrire les lettres en français." I think I shall play for safety by commencing somehow like this, "Cher sir, In reply à votre lettre, j'ai l'honneur to inform you that vous êtes a good old sort, et que je pense qu'il est jolly fine of vous to offer me the means of making piles of money (des montagnes d'argent)," and so on. A few extracts from the letter will explain its contents. The letter itself is typed, and as the German gentleman has evidently broken the capital I of his machine he gets as near as he can by employing the capital J instead. Thus: "Dear Sir, J got knowledge of your adress by — and J am going to do the inquiry to you by these lines if you would be willing to send me good and interesting photographs for all time, and what conditions you have. In regard to your explanation J tell you, J especially like to get photographs of the following things: animals. If you're capable to send me fine and beautiful photographs of animals J would be a steady buyer of them. It's possible that you send me regular sample-pictures and J'm able to choose what J like to get for business chances? (I course, J would send the money immediately to for photographs which J did keep. J especially like to get good and fine photographs without any mistakes in making. Please let me know as soon as possible if you're agree with my letter and J expect your answer with great interest."

That sounds tempting, doesn't it? There is only one thing necessary to bring me in a pile of German specie, but, alas! that one thing I have not, and never shall have. I do not possess a fine and beautiful photograph without any mistakes in making.

* * *

The other golden opportunity is described at length in the columns of a Devonshire newspaper which offers prizes for the best photographs. As readers may like to embrace this chance of acquiring filthy lucre, I will give some of the conditions laid down; for you must not suppose that all you have to do is to whack in any old thing and collect the prize money. It is not quite as simple as that.

* * *

The photograph must be accompanied by a description of the picture. This not only affords practice in journalistic work, but prevents the editor describing your study of a Brixham trawler as a fire in Exeter. A light background is desirable. If your subject has a dark one, haul it out and put in a desirable one. You must put your name and address on the back and add a signed declaration that it is your own work and property. A sworn affidavit is not insisted on, but would no doubt be appreciated. The photograph should be sent in on the day it is taken, and forwarded by train so as to reach the office the same night. If the last train has gone, there is no real objection to the chartering of a special. But you must not send the same photograph to any other journal, and the copyright of the picture is to become the property of the editor. He wants a monopoly of the best that is to be got, and in return for the handsome prizes he offers he is surely entitled to this, and more. So the first prize may be withheld altogether if the print is not up to high-water mark.

* * *

Such are the conditions hedging about the wealth you covet. Riches are not to be easily acquired. Yet is the venture well worthy of attempt. For, behold, if you succeed in planking in a print with description on the day it is taken, and the editor approves it, and accepts the copyright, he will publish it in his paper, and the prize is yours. All the trouble and expense to which you have been put will seem as nothing. You will have conquered all difficulties, overcome all obstacles, and achieved your reward. It may not seem a big fortune, and you may have to win more than one prize before you are enabled to retire from the pursuit of wealth and live comfortably on your means. And what is this great and glorious reward of your exceptionally able photographic work? Is it a mere medal? Is it some paltry order for goods at the local cheesemonger's? No. It is hard cash, or its equivalent in the form of a cheque. And not, mark you, just German money, but good sound English coin, and I give the amount a whole line to itself.

* * *

Half a crown.

THE WALRUS.

SUBSCRIPTIONS.

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PHOTOGRAPHY

A·JOURNAL·FOR·EVERY·CAMERA·USER.

EDITED·BY·R·CHILD·BAYLEY.

PUBLISHED·WEEKLY.

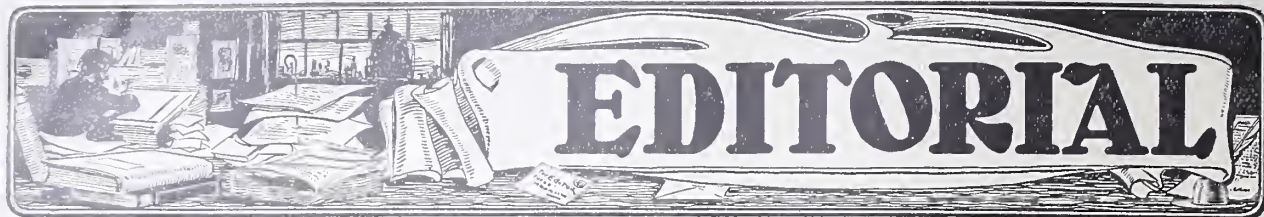
NOVEMBER 10TH, 1908. TUESDAY. No. 1,044. Vol. XXVI.



SUNSET ON THE MARSHES.

BY W. J. GODKIN.

Awarded the Bronze Plaque in the Advanced Workers' Competition for September.



Hand Camera Work.

Now that the bright light of summer has gone, it may be well to remind those who are only possessed of hand cameras that are not provided with lenses of a larger aperture than, say, $f/11$ or $f/8$ that ordinary hand camera work is practically impossible. When the pictures are of a very open character, such as general views and landscapes of that class without any very deep shadows in the foreground, a snapshot exposure, which is probably between the twentieth and thirtieth of a second, may give a properly exposed plate under favourable conditions. But failure will only result with most of the subjects which hand camera workers attempt unless the camera is put upon a stand, the lens stopped down a little, and time exposures given. Where the shutter can be slowed down to an eighth or tenth of a second and the lens used at $f/6$ or thereabouts the case is different; but in the great majority of instances it will be found that a "snap" exposure at this time of the year simply means an underexposed and useless negative.

Clouds in Lantern Slides.

We were tempted the more to accept and publish the article by Mr. Kingham, which will be found this week on page 548, from the fact that it reached us only a day or two after the judging of the *Photography and Focus* lantern slide competition. Although this had called forth a better collection of slides than in former years, there were still a great many which might, well from the baldness of their skies have formed texts for the article in question. Bad as is the effect of a sky represented by blank white paper on a print, it is even worse when it takes the form of clear glass in a lantern slide, through which the light shines so powerfully as to dull down and spoil the picture entirely, if it is at all delicate and soft. Realising this, the slide-maker seems to be tempted to get his landscape strong and bright, so that it may hold its own against the clouds, and the result of the combination is altogether too harsh and glittering. Perhaps our contributor's article may have the result of causing some of the competitors to adopt the method he describes, and so lead to the improvement of their work.

The plan described is, unfortunately, only applicable in its entirety to slides that are made by reduction in

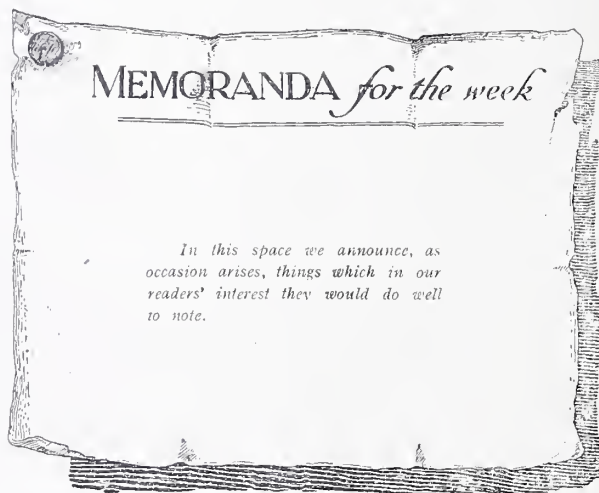
the camera. It is not possible in contact work to use the landscape slide as a mask. But very nearly as good a result can be obtained by cutting a black paper mask and vignetting the clouds with this, clearing them up a little more along the edges where it is absolutely necessary by means of the reducer given by Mr. Kingham. This has the merit of not altering the colour of the deposit which it reduces. A little overlapping of clouds and landscape in most parts will be found unnoticeable, and it is wise only to use the reducer where it has been found to be necessary. Of course, it is possible to print the clouds on to the same plate as the landscape, but where the pictures are as small as they are in a lantern slide this is not very easy, and the use of two plates is to be preferred.

It has one drawback, however, and that is that if we have a landscape and a cloud negative which suit each other for printing on paper, it is not practicable to combine them in a slide, as the lighting of the clouds and of the landscape would then be in opposite directions. In such a case one slide at least must be made in the camera. Better than any other method is it to get both landscape and clouds with proper printing value on the same negative, doing away not only with a great deal of trouble, but with

all risk of incongruity and of bad register.

Photographers and the Licensing Bill.

An aspect of the Licensing Bill which strikes us as a novel one was mentioned at a meeting of the Bowes Park Photographic Society recently. Mr. Craston there expressed his hope that the ancient inns of the country should be recorded by photography before they were swept away by the licensing reductions. It may be urged that the Bill is not intended to destroy structures, but only to change the purpose to which they are to be put; but the slightest consideration will show that the one almost inevitably follows from the other. It is a curious fact that no other trade is carried on so frequently in buildings of antiquarian interest as that of the licensed victualler. In many villages the inn is not only the most picturesque structure, but the most ancient. We recall one which was formerly an abbey; the abbots' crests are still to be seen on the cellar doors. Another is known to date back to the fourteenth century, and claims to be much older still. Here and there about



the country the old galleried coaching inns are still standing, threatened not merely by the Licensing Bill, but by the revival of trade due to motoring, which has drawn attention to their want of modern conveniences. It would be well, then, if photographers would seize the opportunities that still remain of forming a pictorial record of these relics of the past.

GRATITUDE.

Roberts the porter, whose nickname is "Bobs,"
Who sweeps out the office, and does the odd jobs,
Persuaded me lately—I wonder he did—
To "take" Mrs. Roberts, himself, and the kid.

I fear 'twas his flattery made me agree
To tackle a task so distasteful to me.
But he said, "These pereshnals do make 'em look
frights,
But a artist like you, sir, would do us to rights."

So I threw up a Saturday bicycle run,
And said after luncheon the thing should be done.
A large vacant office as studio served,
Which needed some cleaning, as Roberts observed.

They put down a carpet (too small by a lot),
And two kitchen chairs from the liftman were got;
They worried the kid to "keep still, naughty boy,"
Till he howled to distraction—a thing I enjoy.

The negatives proved of the woodenest kind,
But I thought they'd appeal to the Bobsian mind.
They were vividly sharp, which I hoped he'd approve,
Excepting the kid, who had happened to move.

So I gave him the pictures with never a qualm,
And he took them and held them the length of his arm,
Then studied them closely, and, biting his lip,
He murmured some words which I took for "Great
Pip!"

He never said "Thank you." No more did he
speak.

But he showed me some prints at the end of the week,
Which he told me were taken, the previous day,
At two bob a dozen, down Whitechapel way.

Originality.

Some amateur photographers, observes a contemporary, when they are photographing at some place that figures on a commercial picture postcard seem to do their very best to get exactly the same view as that on the card, attracted, perhaps, by the fact that its maker's technique is better than their own. Their pictures, therefore, instead of possessing any originality, are little better than reproductions of the work of others, and might just as well be made by copying the card as direct from nature. The practice is one to be condemned, not only as being a little mean, but also as tending to make the amateur who indulges in it less and less able to select subjects for himself, and more and more dependent on outside help. There is just this to be said, however, and that is that the picture postcard subjects which one sees in the shop windows are often so poor that it is not likely that the photographer who selected them as models would ever be able to do anything very noteworthy off his

own bat. In many cases the picture postcard trade has acted most injuriously on the quality of the local views. In the past these were usually the work of the local photographer, who at least was on the spot, knew the district, and could select the most favourable conditions for making his negatives. Now the commercial postcards are often made from negatives obtained during a flying visit by a photographer commissioned by some publishing house, who "does" perhaps half a dozen places in a week. And these are the models which some amateurs have been known to copy.



THE DUKE OF WESTMINSTER AS M.F.H.
"O'ER HEDGE AND DITCH," BY COLIN C. HETHERINGTON.
Awarded a prize in Class II. of the Thornton-Pickard Competition.

"Camera Work."

The latest issue of this beautiful quarterly magazine contains reproductions of a number of pictures by Baron A. de Meyer, including four of his now well known still life subjects. The letterpress consists in the main of two articles—"The Camera Point of View in Painting and Photography," by Charles H. Caffin, and another entitled "Pictorial Photography: a series of interviews," by George Besson. M. Besson has succeeded in eliciting a most interesting series of opinions on the subject from French artists, critics, and men of letters, including several of the foremost people of the day. Rodin's broad-minded appreciation of pictorial photography is well-known, and we have it here on record, but there are many others. Bartholomé condemns the intervention of handwork. "One should stick to composition, to selection, to the variety of lightings, to his own preferences in arrangement, and I assure you that, if he lets it go at that, then gradually the machine and the light will give him results entirely personal." Matisse is guarded. "Photography can provide the most precious documents existing," he observes, "and no one can contest its value from that point of view. If it is practised by a man of taste, the photograph will have an appearance of art." Altogether Mr. Stieglitz has not produced a more interesting issue than the one before us, which well maintains the position of this unique magazine.

REPLIES TO CORRESPONDENTS

REGULATIONS.—(1) Envelopes must be marked "Query," and the "Enquiry Coupon" found elsewhere must be enclosed. (2) The full name and address in addition to a *nom-de-plume* must be given. (3) Only one question on one subject is allowed in each letter. (4) Prints may be sent for criticism, but a separate coupon must be sent with each print, and a stamped addressed envelope (not loose stamps) for their return. Queries are dealt with in strict rotation in the order received. Only "Urgent Apparatus" queries will be dealt with by post, for which purpose a stamped envelope must be enclosed.

KAMRA (Falsfield).—Three minutes is quite sufficient.
G. IVES (Brixton Hill).—Many thanks for your note; we have sent on the information.

BEGINNER (Chesterfield).—It is quite a cheap form, but is good value, and can be used for all purposes.

TINING (Tonyandy).—The only method would be that described on page 303 of *Photography and Focus* for August 18th, 1908.

MISS HAWKER (Plymouth).—We have passed on your letter to our advertisement department, and have asked them to look into it.

E.T.D. (Liverpool).—We draw them under a straight edge; but your way seems the better if it is as effective. Not having tried it we cannot say.

PHOTO (Portsmouth).—There must be some mistake. The process is not at all workable. The print would never dry, and the only result would be a sticky mess.

VENAN (Forest Hill).—A saturated solution of mercuric chloride to each ounce of which five drops of hydrochloric acid have been added is what is generally recommended.

DARJEELING (Bettws).—We have heard nothing in favour of or against either; why not write and ask for references? We do not know any firm in that business that we can recommend.

CYMRO (Aberdare).—The No. 3A Carbine with Aldis anastigmat is made in postcard size by Messrs. W. Butcher and Sons, and sold at £5 2s. 6d. We can recommend it as excellent value.

P. CLARK (Harrow).—Either of the first two given on page 320 of *Photography and Focus* for August 25th, 1908, is suitable for negative making, which, we presume, is what you mean by "all round work."

PERPLEXED (Boscombe).—The usual cause is excessive over-exposure. If you are sure this is not to blame in your case, it is probably due to the use of a developer of a very powerful character and to light fog; the two combined will often have such a result.

AMBITIOUS (Rugby).—You will have to cement the film to one glass first, and then after a lapse of a few days for the balsam to harden to cement the other glass down on it. The procedure generally would be as described in our article. The only material to be bought would be the balsam, which is usually sold in shilling bottles.

SHAWLANDS (Glasgow).—Your print has been returned. The fault is due to reflections from the sides of the camera, which, falling on the edges of the plate more than on the centre, cause the latter to be less dense. By blacking the interior the fault will be remedied, at least in part. It is reduced by fitting a deeper hood to the lens.

IN TROUBLE (Brighton).—It might do so, but if the bellows are properly blacked it should not be a source of trouble. In any case, by using a longer hood to the lens, its field can be cut down so as to prevent most of the light otherwise admitted from getting to the bellows. There are plenty of half-plate lenses used on quarter-plate cameras.

A. WINTER (Aussig).—It is practised very little indeed in this country; we hardly know a single photographer who works it. Special colours are supplied for lantern slide work, and these should be equally suitable for tinting stereoscopic transparencies. They are advertised from time to time in our columns, and Fallowfield, 146, Charing Cross Road, London, W.C., and other big dealers supply them.

BIANCUS (Honor Oak Park).—Having pointed out recently that sulphurous acid (the acid which is always the active agent in an acid fixing bath) is an exception to the rule which forbids acid and hypo from being brought into contact, we did not repeat the information in the article. An acid fixing bath, properly made up, therefore, would not have any injurious effect on the permanence of the prints, our remarks applying to all acids likely to be met with except sulphurous.

MERAVINS (St. James' Park).—You cannot do better than bleach the negatives in a saturated solution of mercuric chloride, to each ounce of which a couple of drops of strong hydrochloric acid have been added, wash them well and blacken in strong ammonia half dram, water four ounces. It is well to give two or three of the intermediate washings with hydrochloric acid half an ounce, water one pint, instead of plain water. After intensification the negatives should be washed in running water for a quarter of an hour and then dried.

A. L. MACDONALD (Leeds).—We fear there is no remedy.

E. BOSTON (Darlington).—We have handed your letter over to our advertisement department for attention.

GLOSSING (Ashton-under-Lyne).—The process giving the highest degree of gloss is that described on page 303 of our issue for August 18th, 1908.

W.E.M. (Hindhead).—There is really very little to choose between them. If we have a preference at all it is only a slight one in favour of No. 2.

H. E. EVITT (South Norwood).—Up to the present we have had no opportunity of trying it, and can only advise you to communicate with the advertiser.

PLUTO (Sunderland).—Certainly it is permissible; unless the picture is exclusive, in which case this should be pointed out as an additional reason for acceptance.

MERU (Dorking).—If you will send us a negative and a type-written letter we will do our best to help you; but most of your communication defies our handwriting experts.

R. D. THROWER (Canonbury).—Supplementary lenses would certainly not give you sharper pictures; you would do well to get another lens, preferably one of the anastigmat type.

BLOIS (Blois).—No; it ceased at the end of April. Full particulars of all competitions that are running are given on the competition page, which we print nearly every other week.

J. ANNAND (Child's Hill).—Mr. W. Angold wishes us to say that the nearest society is the Willesden Polytechnic Photographic Society meeting at the Polytechnic, Priory Park Road, Kilburn.

C. MANTELL (Preston).—The meetings shall duly appear, the first card seems to have miscarried. We are taking a day off shortly and hope to master your letter, if we fail "The Walrus" will have to have a try.

J.D.L. (Bath).—All depends on the storage. We have kept the very fastest plates in a cupboard in an ordinary living room for over twelve months between exposure and development, and were unable to detect any signs of deterioration.

OMBREY (Plumstead).—If you will repeat your enquiry sending us a negative we will try and help you. We suspect light fog, due to the stretch of the bellows pulling some part open, but cannot say more definitely until we have seen the negative.

TRIPOD (Clapham).—The ordinary landscape pattern and an Aldis lens would do what you require very well. A half-plate is what we should advise as being most likely to please you in the long run; the actual pattern selected depending on how much you are prepared to spend.

S. G. VAUGHAN (Lavender Hill).—The reason is that the negative is wanting in contrast presumably from insufficient development. Intensification with mercury would improve it, we expect. If fifteen instead of twelve minutes had been given it would have made all the difference.

J. H. PHELPS (Crouch Hill).—There is nothing novel in using a plate that is larger than the finished prints are to be, in order to allow for trimming, etc.; in fact, this is invariably done. If your lens will cover a 5 x 4 plate, we see no reason why you should not do what you propose, if your pictures at present are too small.

BUCKLAND (Hampstead).—The brasswork of a camera can only be kept bright by taking ordinary care of it in storage. As it is lacquered it should not be polished, or even wiped too frequently. On no account should any attempt be made to keep the metal of the lens polished except by storing it in a wash-leather bag or case.

O. STREET (Ashford).—As you do not state the focus of the supplementary lens we cannot tell you its effect upon the focal length of the lens to which it was added. We should expect a slight falling off in the very fine definition which is obtained with the lens you have got. If the camera is one of fixed focus and the supplementary lens is as large in diameter as the other lens, exposures would not be appreciably altered.

ACTRESS (Fulham).—It would be better to tip the camera up bodily, rather than to swing the front, or else to try raising, not swinging, the front as high as it will go. You may have to stop down a little in the latter case to get the picture sharp, but in the former it may be satisfactory at the full aperture. This is best settled by looking on the screen. We should try tipping. There is no great point in keeping the camera so low.

A. G. ELSE (St. Helens).—Slides were despatched the day we got your letter.

ABDUL RAHMAN KHAN (Wazirabad).—(1.) There is practically nothing to choose between them in those respects, all are excellent. (2.) Ilford P.O.P.

A. H. TOMPKINS (Rugby).—The definition should not be appreciably impaired, nor will the exposure necessary be altered, if the camera is one of fixed focus.

PTOLFFMY (Newcastle-on-Tyne).—Not necessarily, but the strength of the developer should be such as is suitable to the particular plates in use, whether fast or slow.

A. LENOX (Stamford).—A combined toning and fixing bath is the following:

Ammonium sulphocyanide	...	...	...	30 grains
Common salt	...	...	...	60 grains
Hypo	...	...	...	4 ounces
Water	...	...	...	1 pint

When all is dissolved, two grains of gold chloride dissolved in a little water is added. We do not recommend any combined bath.

PERPLEXED (Thetford).—There is no real disadvantage in the use of the material named. B would be our selection. The other is well worth the extra price, but you would not be spoiling the ship by getting the cheaper.

SIDNEY SMITH (Hornsey).—The lenses are of no use whatever for the purposes named. Enlarging is simply photographing and the calculations given in the article, although applied in that case to enlarging, are equally applicable to photographing in the ordinary way.

STAINS (Eastry).—If they are due to damp while printing it may be possible to remove them by placing the negative for half an hour or so in a combined toning and fixing bath for p.o.p. In mild cases this acts as a cure, bad cases nothing will remedy. The plate is then well washed and dried.

P. CLARK (Stalheim).—In most cases ferricyanide and hypo is employed; but you would do well to get and read "Intensification and Reduction," by H. W. Bennett, price 1s. nett, or post free from our publishers for 1s. 2d. This gives formulæ and directions when they should be used. There is no one reducer that can be advantageously employed under all circumstances.

Awards in Our Competitions for October.

The Beginner's Competition.

CURIOSLY enough, the one competition this month in which the work shows a decided advance in average quality is the "Beginners." There are, of course, plenty of very crude prints from negatives which are best described as purposeless, but scattered though the bulk of these is a good sprinkling of something decidedly better. There are evidences that the "Critical Causeries" which we publish are being read and pondered by those for whom they are written, and the result is showing in the work. There are still a great many which would not be made at all, or being made would not be sent, were those articles studied by the senders, but that is only to be expected. The awards are as follow:

FIRST PRIZE.—A signed copy of "The Complete Photographer," by the Editor of *Photography and Focus*, "A Quiet Spot," by W. Bodily, 1, Willow Park, Carnoustie, Forfarshire.

SECOND PRIZE.—A free subscription to *Photography and Focus* for twelve months, "A Portrait Study," by F. F. Wells, United University Club, Pall Mall.

CERTIFICATES.—"Meditating," by W. J. Chapman, Stawell, Victoria, Australia; "A Portrait of a Lady," by W. E. O. Scott, 55, King Street, South Shields; and "Pæona Roses," by John Sandilands, Allanbank, Belhaven Terrace, Wishaw, N.B.

The Advanced Workers'.

THE entries in this competition showed a decided increase in numbers, such as is generally to be looked for at this time of year. The average of merit was not noticeably higher than usual, but there were certainly a great many pictures of excellent quality, and comparatively few decidedly poor ones. Several competitors sent in quite large batches of prints, but it cannot be said that they improved their chances of success by so doing. In fact, if anything, they lessened them, as it is hardly likely that, in sending a number, they gave to each one that concentration

of care which alone can render an award likely to be secured. The criticism of the prints is well in hand, and we hope to get it all off by the end of the current week at the latest. There was some unavoidable delay in returning prints last month, but this we hope will not occur again. The following are the awards:

SILVER PLAQUE.—"Industrious," by Charles Waring, sen., 21, Devonshire Road, Liverpool.

BRONZE PLAQUE.—"An October Morning," by J. F. Wilde, 41, Dacy Road, Liverpool.

BRONZE MEDAL.—"The Legal Limit," by Clarence Ponting, 17, Oak Lane, Manningham, Bradford.

CERTIFICATES.—"After a Snowstorm," by Ernest G. Hails, 83, Bath Street, South Shields; "Woodlands," by Thomas Carlyle, 5, Bank Street, Paisley, N.B., and "In a Northern Port," by John Walton, 7, Esplanade West, Sunderland.

Special Subject Competition.

IT must be confessed that the general average of work sent in to this competition, which had as its subject "The Portrait of a Lady," was not at all high. Quantity rather than quality was the characteristic of the competition. Many of those who entered wisely selected very charming models, but it was very rarely that a print was found in which the photographer had risen to his opportunities, while there were none that could be said to be more than ordinary in quality.

The full list of the awards is as follows:

SILVER PLAQUE.—"Portrait of a Lady," by Alfred and Marie Bracewell, 20, Heaton Grove, Frizinghall, Bradford.

BRONZE PLAQUE.—"Awaiting Papa," by F. Frank, 52, Rue Lebeau, Brussels.

BRONZE MEDAL.—"A Study," by W. Barber, 50, Chapel Road, West Norwood.

CERTIFICATES.—H. C. Scott, Heathersett, Campion Terrace, Leamington Spa; "A Dutch Maiden," by G. A. Fowkes, 120, Loughborough Road, West Bridgford, Nottingham; and "By the Light of the Fire," by Ivy Weston, 20a, Sandgate Road, Folkestone.

"Photography and Focus" Slide Competition. Additional Awards.

by Rev. H. O. Fenton; and "George Alley," by H. L. Michael.

CLASS D.—"The Baker," "The Village Belle," and "Domestic Duties," by N. Blake.

CLASS E.—"Narcissi," by Arthur Black; "Blackberry Flowers," by T. G. Hibbert; "Gooseberries," by P. W. Morris.

CLASS F.—"Diatom, Heliopelta $\times 175$," by W. H. Pratt; "Snake Swallowing a Frog," and "His First Appearance," by W. Kinghorn.

THE list of awards published in our last issue was incomplete, as far as certificates were concerned. The following should be added thereto to form the complete list:

CLASS A.—"Lobster Catchers preparing for Market," R. W. Hibbert; "A November Day," by F. A. Tinker; and "Spring," by W. Ives.

CLASS B.—"Clifford's Inn," by Rev. H. O. Fenton; "Snow and Sun," by W. H. Geerkens; and "Wood Pond," by F. A. Jacobs, jun.

CLASS C.—"The Market, Gouda," and "Middle Temple,"



Skies in Lantern Slides.

BY T. KINGHAM.

Special to "Photography and Focus."



Describing a simple method of putting
in skies into lantern slides when these
are made by reduction.



SET of excellent slides was recently shown at a society of which the writer is a member, but a great proportion of them were spoilt by the presence of a considerable area of the picture, which was simply clear glass "sky" without the least vestige of a tint, much less of clouds. The exhibitor seemed to be a little conscious of the defect, for he made a little protest against the printing-in of clouds as illegitimate, although if ever the end justified the means it did so in the case of his pictures. Perhaps the method followed by the writer may be found of interest to the readers of *Photography and Focus*, and obviate any necessity for any such apology on behalf of their own slides.

When an author sits down to describe a process with which he is familiar, he generally starts by saying that it is an extremely easy one. In this case, it is perhaps more accurate to say that the putting in of clouds in a lantern slide is by no means so easy as it is in the case of a print, but that it presents no difficulties that a little painstaking will not surmount. The method described below is only applicable to slides made by reduction in the camera.

The first proceeding is to make the landscape slide, which needs no description, since it is made in the ordinary way. The clouds, it should be pointed out, will be on a separate plate which is to be used as a cover glass. When the landscape slide is being developed, the exact time which it is in the developer should be noted, as this will enable us to get a perfect match in tone, which otherwise would be difficult. When the slide is finished and dry it is attached to the inner or ground surface of the focussing screen of the lantern slide camera, adjusting it as accurately as possible, and

attaching it by means of gummed strips, or preferably by strips of adhesive plaster, which can be pulled off readily. The film of the slide must be turned towards the ground-glass, taking great care not to injure it in the process. The cloud negative is then inserted in the holder and the clouds adjusted so as to fit into the proper place above the landscape.

In doing this we must not forget that the cloud slide is to be used as the cover glass; that is to say, it will be

turned the other way round in the camera. If the lighting in the landscape negative and in the cloud negative is in the same direction in both, as it would be if the two make a harmonious print by double printing, then the cloud negative in the slide making apparatus must be turned the other way round, with its glass side towards the lens. If the cloud negative is a very dense one, which it should not be, it may be difficult to see the details of the clouds on the ground-glass. In such a case, a friend can be asked to burn a few inches of magnesium wire behind it while the adjustment is made.

When the position and scale of the clouds on the focussing screen is decided, and they have been sharply focussed, the back of the camera must be racked in towards the lens, by an amount, as nearly as can be judged, of the thickness of a



BY MISS M. BACK.

Awarded a Prize in Class VI. of the Thornton-Pickard Competition.

lantern plate. The landscape slide, having been removed from the focussing screen, has its more transparent portions, except the sky, blocked out with photopake applied to the glass side. This operation need only be done very roughly. The landscape slide is then placed film upwards in the dark slide, a lantern plate laid on it film downwards, and the exposure is made in this way, *through* the landscape slide, which thus acts as a mask.

It may seem wasteful, but it is actually an economy, to let the first exposure be a trial one, covering over the cloud negative with a piece of card so that the plate receives a series of exposures in strips, enabling the second exposure to be correct straight away. After exposure the plate is placed in a dish, covered with developer of the same composition as was used for the landscape slide, and a card being put over the dish, it is developed for exactly the same length of time, and is then fixed and washed. In all cases the developer must be mixed up fresh for each plate, or the colours of the slides are sure not to be a match. After the first few attempts the slide maker will find that he can judge of the correct depth of the cloud slide while it is wet, and so need not wait until it dries, but can give the correct exposure straight away. The longer the exposure the heavier will be the clouds, and the exposure must be adjusted to give precisely the depth or strength of clouds required, with the time of development adopted. No attempt must be made to get the correct contrast by altering the time of development or the composition of the developer, as this results in a different colour, and the clouds will no longer match the landscape.

When the cloud slide has been made and has been fixed and well washed, it may happen that the landscape slide has not quite masked it as effectively as it should, and that there are details showing in the landscape portion of the slide which interfere with the effect. A little very faint detail or overlapping will not matter, but if it is troublesome it is easily removed. For this purpose the cloud slide, while still wet, is held the right way up close to a stream of running water from the tap. A piece of white card or opal should be behind it, so that the work can be watched. Then the following solution is applied with a camel-hair brush to the parts which are not required, and will be found to remove them almost instantly. The liquid should be applied liberally and the

slide rinsed constantly, to prevent any hard line from showing. The solution is very poisonous, and should be thrown away as soon as it is done with.

Potassium cyanide solution 2 drams
Tincture of iodine 1 dram

There is no need to weigh out the cyanide; a piece the size of a pea may be put into a couple of drams of water and left for half an hour to dissolve, and a little of the iodine tincture added. The strength is not important. The solution should be colourless.

After reduction in this way has been performed, if it is necessary, the slide is well washed and dried. All that then has to be done is to mask and bind up the two slides together. As it is important that they should be in exact register one with the other, it is better not to have a paper mask between the two. The writer masks his landscape slide by means of a ruling pen and Indian ink, drawing a line where the margin is to come and then widening this out to about an eighth of an inch. When this is quite dry, a spot of seccotine is put at each corner of the slide, and the cloud slide is laid on top, and the two are adjusted until the two skylines exactly register. If too little seccotine is used, it will be found difficult to slide one on the other to accomplish this. When they register exactly, they are pressed firmly into contact and put away for a day. A paper mask is then stuck on the outside of the slide so as to extend almost to the inner margin of the ruled lines, and the slide is bound up and spotted in the usual way.

It is certainly more trouble to make a lantern slide in this way than one which simply has bare glass for its sky. But the trouble will be found to be amply repaid by the improvement in the slide, and many an effective picture can be made by the addition of clouds to one which, without them, is hardly worth making into a slide at all.

THE WEEK'S MEETINGS.

MONDAY, NOVEMBER 9TH

Attercliffe P.S. Annual Meeting.
Southport P.S. "Velox Paper." W. F. Slater.
Oxford C.C. Exhibition of Members' Lantern Slides.
Preston C.C. "Other People's Children." Kenneth Bishop.
Wolverhampton P.S. "The Humble Beauties of the Flower World." E. Seymour.
Bradford P.S. "Photographic Fakes." J. F. Seaman.
Cripplegate P.S. "Exposure and Development for the Subject." C. W. Coe.
Kiddersminster & D.P.S. "Trimming and Mounting." H. W. West.
Lancaster P.S. Thornton-Pickard Co's Specialities. R. Hesketh.
Leek P.S. *Photography and Focus* Prize Slides.

TUESDAY, NOVEMBER 10TH.

Kinning Park C.S.C.C. "Art in Portraiture" and "Nature." J. P. Miller.
St Helens C.C. "A Holiday in Holland." A. Elke.
Seacombe Victoria P.S. "Velox Paper." W. F. Slater.
Mosslands P.S. "Something about Lantern Slides." J. Hugginson.
Hanley P.S. "Agfa Specialities." Mr. Hart.
Scarborough & D.P.S. "Mexico." Dr. Tempest Anderson.
Osley & D. Camera and Art S. "Retouching." J. Way.
Hallifax C.C. "Figure and Genre Studies." A. Cohen.
Leeds P.S. "Holland and Hollanders." James W. Wright.
Glasgow Southern P.A. Lantern Slide Competition.
Hackney P.S. "The Romance of London Streets." A. H. Blake.
Widnes P.S. Thornton-Pickard Prize Slides.
Manchester A.P.S. Members' Slides.
Nelson C.C. Lantern Slides. H. J. Horton.
Nelson P.S. "Control." T. Lee-Syms.
Bootle P.S. "Flower and Fruit Photography." E. Seymour.
Rochdale A.P.S. "Peeps at Life in the East." J. W. Hadfield.
Birmingham P.S. Midland Federation Slides.

WEDNESDAY, NOVEMBER 11TH.

Borough Poly. P.S. "Lantern Slide Making." F. W. Crutenden.
Everton C.C. "Development." E. N. Ellis.
Coventry P.C. Lantern Evening.
Acton P.S. *The Amateur Photographer* 1908 Prize Slides.
Stockport P.S. "Velox Paper." W. F. Slater.
G.E.K. Mech. Inst. "Composition in Landscape."
North Middlesex P.S. "Brimoli." Louis Dick. &
Croydon C.C. "Autochromes." T. K. Grant.
South Suburban P.S. "Afar in the Fatherland." W. L. F. Wastell.
Chorley P.S. "Cloud Photography and Printing in." A. W. Cooper.
Manchester A.P.S. "Cheetham's Hospital." J. G. Phelps.
Leeds P.S. "Oil Printing." J. W. Charlsworth.
Bristol P.C. "Norman Architecture in Glass." G. Chilton.
Wimbledon Park P.S. "Trimming, Mounting, and Colouring the Print."
Northampton N.H.S. & F.C. "How to Select a Hand Camera."
Edinburgh P.S. "Rise and Progress of Architecture." W. J. Bassett-Lowke.
Hampstead P.S. "Mounting." O. C. Quekett.
Hull P.S. *Photography and Focus* Prize Slides.

THURSDAY, NOVEMBER 12TH.

Photo Art Club (Aberdeen). Informal Meeting.
Ilford P.S. Social.
Leigh P.S. "Promoil." S. H. Williams.
Fenton P.S. "Velox Paper." W. F. Slater.
Brigflouse P.S. "An Evening with Pictures." W. Bagshaw.
Melbourne C.C. "Photography in the Vale of Eways."
Richmond C.C. Prize Slides.
Chelsea & D.P.S. "A Chat about Mont St Michel." A. E. Littleboy.
Rugby P.S. "Marine Photography." F. J. Mortimer.
Liverpool A.P.A. "Midland and Cotswold Villages." W. A. Clark.
Oldham P.S. Thornton-Pickard Prize Slides.
Ealing P.S. Combination Printing.
Dublin C.C. "Hints on the Use of the Camera." Mr. Williams.
Maidstone & District C.C. "What can be done with a Hand Camera."
Manchester A.P.S. "Rotherham and its Festival." Jas. Shaw.
North West London P.S. Slide Competition.
Ardley & Witley P.S. "A Campaign on the Continent." J. Ingram Learoyd.
Bolton A.P.S. "Other People's Children." Kenneth Bishop.
Rugby P.S. "An Evening with Pictures." W. Bagshaw.
Handsworth P.S. "Tabloid Photographic Chemicals."
Leek P.S. Whist Drive.

FRIDAY, NOVEMBER 13TH.

Oliver Goldsmith P.S. "Autochromes." H. Featherstone.
Birkenhead P.A. "Velox Paper." W. F. Slater.
Watford P.S. Record and Survey Work. L. S. Just.
Colne C.C. "Twixt Felt and Linnonderry." A. Plunkett.
Manchester A.P.S. "The New Colour Photography." T. K. Grant.
Ashton-under-Lyne P.S. Dance.
Woolwich P.S. "Abbeys and Churches of S. Essex." C. Forbes.

SATURDAY, NOVEMBER 14TH.

Manchester A.P.S. "Leaves from Nature's Book." J. W. Wade.

MONDAY, NOVEMBER 16TH.

Lancaster P.S. "The Alps." J. W. Pickard.
Widnes P.S. Prize Slides.
Acton & Chiswick Poly. P.C. "Velox Paper." W. F. Slater.
Preston C.C. "Oxbromie." James Brunton.
Scarborough & D.P.S. "A Chat about Reptiles." W. J. Clarke.
South London P.S. Lantern Slide Competition.
Bowes Park & D.P.S. "Flowers." E. Seymour.
Stafford P.S. *Photography and Focus* 1908 Prize Slides.
Ridley P.C. & Bramley P.C. "Enlargements." Messrs. Mellor and Hartley.
U. S. Ereoscope Spring Competition.
Bedford C.C. Club "At Home" and Competition Slides.
Bradford Grammar School P.S. "The Oil Painting Process." C. E. Jackson.
Clifton & Forest Hill P.S. Competitions—Prints and Slides.
Bradford P.S. "On the Fringe of the Austrian Alps." C. B. Howdill.
Kiddersminster & D.P.S. "Lenses Making." Taylor, Taylor, and Hobson.
Southampton C.C. "Making and Toning of Gaslight Slides." W. H. Trigg.

Success in Competitions.

With Hints on How to Obtain it.

VARIED as are the photographic competitions which are announced from time to time in the pages of the press, it cannot fail to have occurred to every reader of *Photography and Focus* that the same names figure over and over again amongst the prize-

winners. The winning prints are not all attractive portraits, but personal charm in the model is an advantage to the competitor. Sharpness, again, is a quality which commends itself to the majority, and a decidedly fuzzy print is not in the least likely to be successful in such a competition. Originality is another essential. A photographer seeing a winning print may think, "I can do as well as that," meaning that having seen the picture he could arrange something like it and get a photograph that was technically as good. But he might not get a prize all the same. Everyone who has judged a large competition knows how many good photographs are made and sent in which are hopelessly out of the running, simply because they have no originality of subject or of treatment. They are just copies—good

winners. Having noticed this, he has probably asked himself the question why it is that these men take the premier places. Of course, such a question may be answered by saying that it is because their work is "better" than that of others, but this only dodges the real question, which is in what way is this work superior to the rest that it is picked out while other prints are passed by, and how comes it that the same photographers seem to succeed every time? As most healthy-minded photographers feel tempted sooner or later to try their luck in a competition, it will not be time wasted if this subject is looked into a little more closely.

Competing, as the most successful competitors understand it, is an art; and to be successful it has got to be studied. Lucky indeed is the man who, suddenly bethinking him he will enter a competition, picks out a print from those he has by him, puts it in an envelope, and wins a prize. One is not in the least likely to do it at all in that way, and if by some strange chance it does come off once, it will not be repeated. The circumstances of each competition must be studied, and an attempt made to fit the work sent in to the particular competition in which it is entered.

Take, first of all, the trade competitions got up for the best pictures on certain plates or papers, or taken with certain apparatus. These are held with a twofold purpose—one that of popularising the goods and the other that of securing fine examples of work done with them. The winning prints, therefore, are sure to be some which will put the apparatus or material in an attractive light. A picture which only appeals to the few is not what the trader wants at all; he wants something which everyone will like at the first glance—something of the kind which the great majority are trying to do themselves. A pretty face, or rather a pretty picture of a face, appeals to nearly everyone, so that a subject of this kind stands a better chance than one which has not that form



With Thoughts of Home, Sweet Home.

By N. B. Roberts.

copies maybe, perhaps even an improvement on the original—but the original is *there* and the subject is no longer fresh.

Five, ten, or twenty pound prizes are not to be had for the asking. The photographer who aims at winning in competitions must set about the work deliberately. He will probably find it best to think out the most likely subjects for the purpose, and to take negatives specially for the competition, rather than hope to pick out from his stock of negatives something that may do.

In the competitions which are organised by newspapers and magazines, the circumstances are a little different. It is no longer a question of displaying the good qualities of some particular apparatus or material. An effective picture is what is wanted, and pictorial considerations will weigh almost entirely. Not necessarily what are considered pictorial in the photographic world. Many of the newspaper competitions are judged by editors who know nothing whatever of photography, and nothing whatever of art. They make their awards to the prints which come nearest to their own notions of what a good photograph should be; and very quaint those awards are at times. Or else they go to the prints which will make the best reproductions in the paper. These are things to be studied by the competitor who would succeed. It would be very foolish, for example, to send in to such a competition a brown or red toned print on a rough surface paper, as these are proverbially bad for reproduction purposes. A clean, bright, well-toned silver print, or a good bromide or gaslight, not toned, are most likely to be successful in such a case. The print which would stand the best chance in such a competition as the "Advanced Workers'" in *Photography and Focus* would very likely be rejected in the first round by one of the lay journals. It is an example of studying the competition.

When we come to consider the photographic press, we find the awards are made on a different standard. Broadly speaking, the ideal here is the same as at a photographic exhibition: the purely pictorial photograph is the one which alone stands a chance. It may be sharp or fuzzy, black or toned, smooth or rough, but it is judged as a picture and not merely as a technical photograph, and the competitor once more must study his competition.

But there is one thing which applies with equal force to all of these competitions. Having got the negative and made



THE FOUR COURTS, DUBLIN.

By MRS. D. MAHONEY.

Awarded the First Prize in Class IV of the Thornton-Pickard Competition

the print, it has got to be shown to the best advantage. Now, if one thing is certain it is that sticking an untrimmed print in an ordinary stock size of cut-out mount and sending it in like that does not show it to the best advantage, or even to any advantage at all. The sender has not realised the help given to a print by careful trimming. We do not mean merely trimming it neatly with straight edges and square corners, but trimming it to suit the composition, and not merely to fit a stock size of mount. And having trimmed it to best advantage, he can then study how best to mount it. The dull greys and greens and browns which can now be got in large smooth sheets of stout paper, originally made for book covers, will be found most useful for

the purpose. A piece may be cut of any desired size to make a mount, and the picture neatly stuck down upon it. Very rough papers should not be used, as unless the print is very stiff they will give it also a rough, uneven surface. If "American" or multiple mounting is used, it should not be overdone, and the contrasts between the different mounting papers should be subdued and not strong.

Many competitors deprive their prints of all chances of success by ignoring the conditions. Before actually sending off the prints, the conditions should be read through carefully, and complied with strictly. If the name and address are to be written on the back of each print, they should be so written, not merely slipped into the parcel on a loose piece

of paper. Nothing is gained by sending a letter with them. Some judges resent such things as tending to attract an unfair degree of attention to that particular work, while in most competitions a letter would get no further than the lad employed to unpack the parcels. The closing date for entries is a point often overlooked. It should be remembered that parcels are not delivered as promptly by the post as are letters. To be on the safe side, at least two clear days should be allowed between the posting and the closing date, in case of accidents.

One other point should be mentioned. The prints should be properly packed, so that when they come before the judges' eyes they have not lost their pristine freshness, and are soiled or worn, with corners doubled down, or edges cut by string. In a competition the successful man is generally the one who takes no chances. He gets his best negative, makes the best print he can from it on the most suitable paper, tones it as best he can, trims it, mounts it, and packs it so that what the judges see is his best work at its best. Some of this is a matter of good photography, but much of it is just a matter of good sense.



SOUTH AISLE, ELY.

By F. R. G. HEDGES.

Awarded a Prize in Class IV. of the Thornton-Pickard Competition.

About Useful

By A. W. H. WESTON.

Illustrating.

Special to "Photography and Focus."

WHEN a little cash can be squeezed out of the illustrated press to help with the expenses of a sometimes

expensive hobby, no one—not even he who photographs for Art's sake alone—can afford to despise such legitimate means of recuperation. Yet we cannot all photograph topical events and appease the world's appetite for news with newsy pictures; nor can we all photograph beautiful places and wonderful people. In spite of this, however, many of my readers may find scope for profitable work along the lines of useful illustrating set forth herein.

There are not many people who do not know someone who in his or her turn knows how to do something handy or ingenious. It may be his occupation or profession or in some

evenly or from either side with fine diffusion by simply burning a length of magnesium ribbon and keeping it well moving during the exposure; all my illustrations show how this succeeds. The chief idea in most of these, of course, was to show the hands in the actual process of making the various things. There is often a particularly right way of manipulating an instrument or tool; or again, there are stages that are the most particular or require illustrating the most, and these must be decided upon before commencing a series. There are particular points, too, in each picture that are of greater importance, and these must be made prominent or else noticeable by force of contrast.

When we start with the foreground we must consider the shade of the object that is to figure thereon; we must choose a shade for materials that will bring important parts into contrast, yet throughout avoiding anything of a heavy nature that will clog the shadows in the final reproductions.

The method of procedure for most of these illustrations was to photograph the subject upon one-half of a postcard plate, while the other half was covered with a card division. The card was then moved, or the plate twisted, and another stage taken upon the other half. This method, producing smaller pictures, allowed a larger aperture to be used than would otherwise have been the case, and of course a shorter exposure was one of its advantages.

From the small negatives enlargements were made to postcard or cabinet size, on carbon-surface bromide paper, as being most suitable for reproducing. This enabled all the work to be carried out without resorting to daylight, whilst waste was reduced to a minimum by reason of such constant factors.

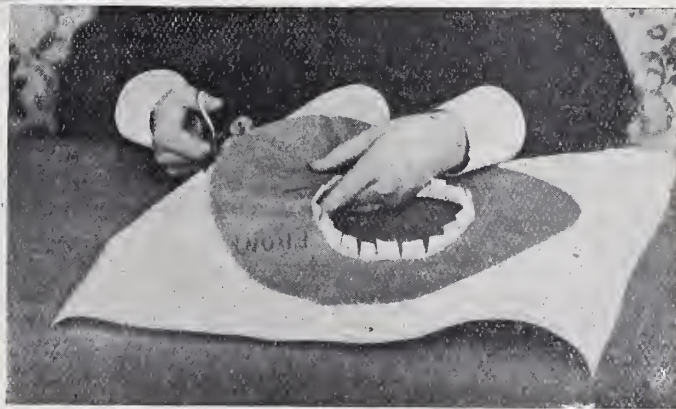


Paper Flowers.

pet hobby that the particular subject may be found; but one must hunt out such subjects and secure the co-operation of those with whom they are found. This covers so large a field that all I can do is to give a few illustrations—picked from several series—showing in what direction the idea may be turned to profitable account. Thus we see hat making, cake making, paper flower making, etc., illustrated in the actual process; and although I do not advise my readers to copy these very subjects, they show what have already proved remunerative, and serve as a guide to others. Particularly would I recommend that the subject be "catchy" or attractive, and not too elaborate, as anything too technical cannot be expected to find a home save with a technical journal. The little things which give pleasure to one's friends, we may be sure, will also please the magazine-reading public, if presented in a sufficiently attractive form.

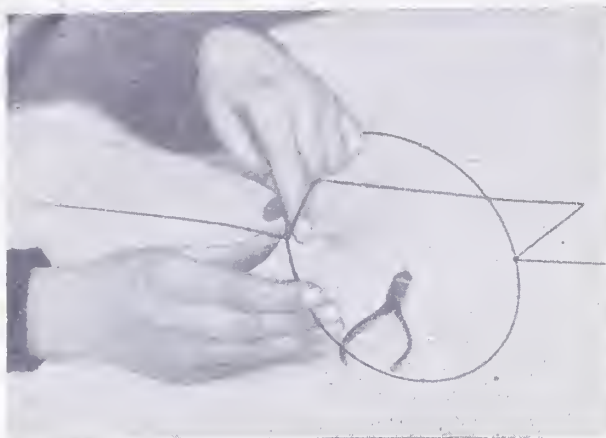
What, then, can be more attractive or lucid than good illustrations? And what can give us better illustrations than the process we have to hand? But there must be co-operation between the one who demonstrates and the one who illustrates. Success will go to a suitable subject well treated.

That the evenings will soon grow long need only add to the attractiveness of the subject, for happily one may master all the photographic part with artificial light. The subject, being compact and not threatening movement, may be lighted



Hat Making.

As a slight guide to the reader, it may be said that these illustrations were taken at an aperture of about $f/11$ on half a plate, burning about nine inches of ribbon over and around the camera. The exposures were developed with the idea of getting a soft negative full of detail for enlarging. In enlarging, the exposure averaged two minutes in an "Ellipsoid" lamp with an incandescent gas light, using stop about $f/7$ for enlarging to about three times lineal size. This, of course, must be taken simply as a guide to the technical details. I shall have achieved my object if I have shown something of



Wire Shape Making.



Icing a Cake.

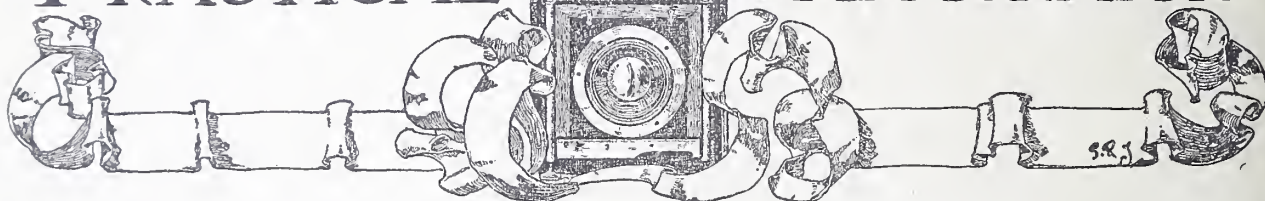
the possibilities of such useful illustrating and fired the reader with a desire to pursue the subject in his own particular way.

Having secured the illustrations to all satisfaction, they must be numbered or titled to fit into the article, which must be written round them by the one whose particular

subject it is. After that comes the critical stage of submission to the most likely magazine, which must be selected with all due regard to the nature of the subject in hand.

Success does not always come at the first time of asking. Rejection of an article may be no reflection upon its merit, because we cannot tell when an editor is over-stocked or not. But although rejection may come, success will await those who persevere.

PRACTICAL PARAGRAPHS



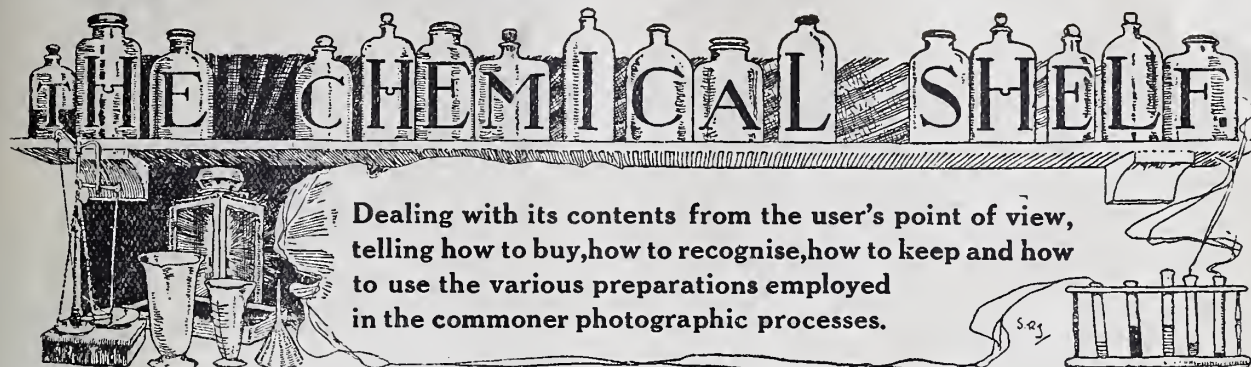
A "BRUSH" for mountant, which has the advantage that it can be made very cheaply, is easily washed, and stands on the table without any fear of getting contaminated, is made by taking a small toilet sponge and a little wide mouth bottle. The one in use by the writer is made with one of the little bottles in which glycerine jelly for chapped hands is sold. The sponge is stuffed into the bottle so that one-third of it remains outside for use as the "brush," the bottle forming the handle. After use, the sponge is washed in warm water and put away until it is wanted again.—S. WATSON.

Quite a lot of prints, writes "Camera" in the "Westminster Gazette," now are being made on paper larger than the picture, the excess being tinted by a brief separate exposure or by double printing under a tint negative or a fabric. Many pleasing effects are to be obtained in this way. The necessities are, firstly, a printing frame as large as the paper to be used, quite apart from the size of the negative, and some black paper from which masks can be made as required. Supposing the picture is to be circular, a circle is cut out of the black paper, using a sheet the size of the paper to be printed, and taking care that it is in the position in which the picture is desired to appear. This mask is placed over the negative, which should be supported upon a piece of clear glass the size of the frame; the sensitive paper is then applied and printed in the usual way. The next step is to remove the negative and the mask, and to lay upon the clear glass a piece of muslin or other choice fabric. A black paper disc exactly fitting the opening in the first mask is then carefully laid over the printed-out picture to prevent further action, and the frame put out until the texture of the fabric is suitably imprinted around the picture on the hitherto white parts of the paper. Many devices and fabrics will suggest themselves to those who have once experimented on these lines.

The photographer on a trip afield should always be provided with several fairly stout rubber bands. With one and three sticks of the proper length, a fairly good tripod may be improvised. The three sticks, joined together by placing round them one of the bands a few inches from one end and spreading the other ends apart, not only form a good tripod, but one that requires no tripod screw. One may lose the lens cap or the shutter may fail to work, yet he may wish to make an exposure. A fold or two of the corner of the focusing cloth can be held in position over the lens while the shutter of the dark slide is drawn, and then the exposure can be made by taking off the rubber band, lifting the corner of the cloth, and then replacing the cloth and rubber band while shutting up the slide. There are a dozen ways in which these simple utilities can be employed in emergency cases.—"Camera Craft."

A USEFUL ACCESSORY FOR FLOWER PHOTOGRAPHERS.

Occasionally one comes across apparatus which is useful for purposes other than that for which it is designed; in witness whereof we have the plentiful ingenuities explained by their obliging discoverers in the pages of *Photography and Focus* from time to time. In an elementary school the other day I came across my own instance. For object-lessons the pupils were provided with a little clip fixed on a stiff wire stem and fitting into a small hole drilled in the desk near the ink-well. It holds flowers, leaves, fruit, seed pods, etc., in any position firmly, and I was immediately impressed with the possibilities of its usefulness to the army of flower photographers. It is known officially as Bramwell's Clip Object-holder, and may be had through all scholastic and educational dealers at 2s. per dozen. Perhaps the enquiring amateur can best satisfy himself as to its handiness by getting a sample clip with wooden base, etc., direct from the maker and patentee, Mr. J. F. Bramwell, Powderham Crescent, Exeter, who supplies the lot for 7d. post free.—G. R. HOLT SHAFTO.



Dealing with its contents from the user's point of view, telling how to buy, how to recognise, how to keep and how to use the various preparations employed in the commoner photographic processes.

POTASSIUM BICHROMATE.

Potassium bichromate, otherwise known as potassium dichromate, or bichromate of potash, is a bright red salt, usually sold in the form of crystals, with which is often a reddish orange powder. As it is extensively employed for many purposes besides photography, there is always a possibility of its adulteration; so that for photographic purposes it should only be purchased from a reliable dealer. The condition of the crystals is some guide as to its quality. The brighter and cleaner they look, and the freer from powder, the better it may be assumed is the sample. But too much reliance must not be placed on such a test. There is a powdered form of the bichromate on the market, but this is unsuitable for photographic purposes, on account of the great difficulty there is in dissolving it, owing to the caking together of the powder. As the salt is not a dear one and keeps very well, it is wise to get a stock of the best quality.

Potassium bichromate keeps quite indefinitely, whether in crystals or in solution. It is readily soluble in cold water, but dissolves more rapidly in hot. At ordinary temperatures a saturated solution contains ten per cent. of the salt; so that an easy way of making up a ten per cent. solution accurate enough for all photographic purposes is by adding the bichromate to hot water until it will dissolve no more, and then allowing the solution to go cold. Some will crystallise out, but the clear liquid may be bottled off as a ten per cent. solution. This is the most convenient form in which to keep the bichromate.

Potassium bichromate is very poisonous. Not only is it a dangerous poison when swallowed, but it acts as a powerful irritant to some workers' skin, especially if the skin is sore or wounded. The effect is most marked when it is used day after day, as in professional carbon printing. Used occasionally, it will not be likely to give trouble; and if the amateur is careful to wash his hands thoroughly after using bichromate, giving the nails a good brushing, it is not at all probable that he will experience any trouble.

The main use of bichromate in photography depends on the fact that gelatine containing it is sensitive to light, becoming after exposure insoluble in warm water. On this fact is based carbon printing, oil printing, gum-bichromate, collotype, several processes of photo-mechanical reproduction, photogravure, woodburytype, and other methods. The amateur uses bichromate chiefly in carbon, oil, and gum printing.

The bichromate has at least two other uses. One of these is in Sterry's process for getting a soft bromide print or enlargement from a harsh negative. The bromide paper is exposed for a time long enough to give the proper depth to the highest lights, ignoring the shadows, for which the exposure would be much too long. It is then immersed in a very weak solution either of potassium bichromate or of chromic acid. The strength of the solution and the time of immersion will depend upon the extent of the action which the negative in use requires. The print is then rinsed once or twice and developed in the ordinary way.

The other use of the bichromate is to convert the developed image of a negative or bromide or gaslight print either into silver chloride or bromide. This is a bleaching process, and is followed either by redeveloping with an ordinary developer or by some sulphiding solution. The former method is used for intensifying negatives, and for making rusty or greenish bromide or gaslight prints of a good colour; the latter is a process for sulphur toning.

FORMULÆ.

Solution for Sensitising Carbon Tissue.

Potassium bichromate	...	...	1 ounce
Water	...	...	1 pint

Bennett's Formula.

Potassium bichromate	...	...	1 ounce
Citric acid	...	...	$\frac{1}{4}$ ounce
Water	...	...	50 ounces

The bichromate and acid are dissolved separately and the solutions mixed. Strong ammonia is then added a little at a time, until the red colour changes to yellow. No more than is required to effect this must be used. About six drams will generally be found to be sufficient. This gives a slower printing tissue than the plain bichromate solution, but is to be preferred, as the tissue is much cleaner and less likely to be injured by gas fumes, etc., in the drying.

Sensitiser for Oil Printing.

The formula by Mr. Bennett, just given, answers excellently as a sensitiser in oil printing. (Sinclair.)

Gum Bichromate Sensitiser.

The formulæ for this purpose are legion, and many workers seem to dispense with formulæ entirely. The following has been given by Mummery:

Ivory black in powder	...	...	54 grains
Gum arabic (33% solution)	...	...	1 ounce
Potassium bichromate (10% solution)	...	...	1 "

Cruwys Richards's Formula for Gum Bichromate.

A.—Gum	...	...	2 ounces
Water	...	...	5 "
B.—Potassium bichromate	...	...	1 ounce
Water	...	...	10 ounces
C.—Venetian red in powder, mixed with water to the consistency of cup custard.	...	...

Five drams of A, four drams of B, and two drams of C (all liquid measure) are taken and mixed together to form the solution for coating the paper. This is the coating mixture for single printing. When multiple printing is to be done the coating must be lighter, and Mr. Richards recommends for that purpose a mixture composed of five drams of A, four of B, and one of C.

To Bleach Prints or Negatives.

Potassium bichromate	...	...	90 grains
Concentrated sulphuric acid	...	...	200 minims
Common salt	...	...	1 ounce
Water to	...	...	10 ounces

This solution converts the silver image of print or negative into chloride in a few minutes. Before redeveloping the stain brought about by the bichromate must be completely removed, either by simple washing, or by washing and the application of an alum bath. An ordinary metal developer, without bromide, may be used to redevelop, or the image may be converted into silver sulphide by the usual solution of sodium sulphide.

Bichromate Solution for Sterry's Process.

Potassium bichromate (10% solution)	...	1 part
Water to make	...	10 parts

This is practically one grain in two ounces, and is a very convenient strength for general use, but it may be modified very largely according to the harshness of the negative which is being printed or enlarged. In the ordinary way, the bromide print after exposure is placed dry in this solution for two minutes, then rinsed for a quarter of a minute in two or three changes of water, and then developed.



A CRITICAL CAUSERIE.

By "The Bandit"

Concerning some Photographs by Beginners.

"Critics?—appalled I venture on the name,
Those cut-throat bandits in the path of fame."—BURNS.

JUST as there are some photographers who seem to be incapable of working with a larger stop than $f/32$, so there are some who seem to keep their cameras on the shelf whenever the sun shines, and only sally forth into the field when the weather is misty. The fad is easy to understand, and what is easy to understand is easy to forgive. Mist is a wonderful aid to picture-making, there is no getting round the fact. For the presence of mist automatically "masses" and "broadens" many a scene which the lens would ordinarily insist on registering as niggling and of scattered interest. Minutiae are subdued without necessarily a loss of sharpness. Thus even the $f/32$ man may take photographs on a misty day and yet avoid an undue excess of detail.

So it comes to pass that autumn and winter are often actually more productive, pictorially, than is summer. Here is a picture called "The Fall in Flood" which illustrates the use of (probably) autumnal mist. Even as it stands, this picture is too fussy; its interest is not sufficiently concentrated on one spot; but this fussiness would have been far worse if the kindly veil of mist had been absent. Observe how the mist softens and beautifies the distance, filling it with mystery and suggestion. The distance isn't what you'd call "fuzzy"; the bridge and the fall are perfectly clearly defined, as far as their focus is concerned. But they are curtained by an impalpable something, which tones



The Fall in Flood.

By Ernest Preston.

bad snap—of St. Stephen's on a rainy day; and the thickness of the "London particular" having been presumably

them down, quiets them, and turns the whole picture into quite a superior specimen of topography.

Think what it would have been like on a sunny, mistless day, without atmosphere; think what it would have been like if the bridge, the trees behind it, and the skyline above it to the right (which positively consists of the roofs of houses!) had been as clearly defined as that tangle of shrubbery in the bottom right-hand corner—think of this, and you will immediately realise why I praise this worker for having had the sense to take his view on a misty day.

But alas! Certain aspirants would appear to imagine that the mere presence of mist ensures the success of a work. The mere title, "A Misty Evening," or whatever it is, guarantees the poetic excellence of the effort. "A Sentinel of Empire" is a case in point. It has a fine-sounding name and a superficial impressiveness; but what is there in it, after all?

It is a snap—and, frankly, a

nsufficient, the photographer has aided it by the perhaps unintentional device of throwing the whole of his plate slightly out of focus. I say "perhaps unintentional"—one never knows; but at any rate having got this technically dubious result he has tried to palm it off on us as something very subtle by giving it a big mouthful of a label. Now St. Stephen's on a wet day has a species of sombre grandeur;



Woodland Waters.

W. H. Dunning.

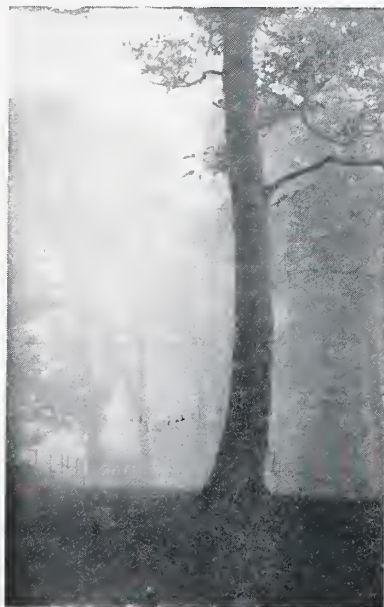
but I decline to allow that this grandeur can be rendered by a fluke, or by faulty technique. Mist might have helped this view—it has helped it to any beauty it possesses—but careless focussing or a joggled camera were emphatically not needed.

As I have said before, art must be intentional, and it must be backed up by technique, or it is an affectation. Simply to take your photograph on a misty day, or to take it out of focus, is not art. It is only aping one of the stale tricks of semi-artists.

"Woodland Waters" is another misty day effort, and fails because the mist has, as it were, been used injudiciously. Mist can make some subjects look interesting; it makes others deadly dull. This is one of the latter. The mist has introduced flatness into what might otherwise have been a bright, if somewhat commonplace, little landscape. Had there been an outstanding prominent tree in the foreground of this picture, all would have been well; for the mist would then have represented atmospheric perspective, throwing back the distance. Compare this picture with "The Fall," and observe how in the latter there is no flatness, because of the strength of the

interesting, were it not for the large figure of the man in the foreground; and on the other hand, the figure in the foreground would not stand out in this bold way were it not for the smoke in the background. There is no very deep merit in this picture; it is not wildly exciting in any way; yet I feel that in this instance the photographer has made the best of the materials that were at his disposal at the time. He knew his business, he knew that the figure was needed, and he got it—and got it in the right place.

There is something at first glance rather attractive about the picture entitled "Mist," but it hardly bears a



Mist.

By Stanley W. Cobban.

close examination. The trunk of the tree has a certain stateliness, which it would probably lose altogether were it not thus isolated by the density of the vapour between it and the other trees behind; and these other trees are nicely and delicately suggested, in the faintest tones. But at the top of the print there is a horizontal branch which should have been cut off; it is utterly stupid. And the ground at the base of the tree is black and level and stupid too. No; I'm afraid this picture is not a "stayer." Its author had an eye to see what looked like a picturesque subject; but he hadn't an eye to see that it wasn't a picturesque one after all.

How often is a pictorial photographer "given away" by his unwillingness to wait for second thoughts about a subject! How often is he tripped up by his inability to resist the temptation to jump at a "bit" which "looks nice," but which really won't bear analysis. And oh! How often doesn't this occur when we are mooning around in a very art-y mood looking for soulful subjects on a misty day.

If it is advisable to think twice before making up your mind about exposing a plate in ordinary weather, then it seems to me a safe rule to think four times when using the camera in fog. Because a fog will make some ugly things beautiful, there is no reason to assume that it is in itself beautiful.



Smoke.

By George G. Gude.

Moreover, even if it is in itself beautiful, it may look far otherwise when imprisoned, hurriedly and without due reflection, on a plate.

A Copying Hint.

ONE of the tasks which the amateur photographer is sometimes asked to undertake is the photography of a single figure or portrait out of a group. There was a practical note by "Reflex" on this subject which appeared in the "Eastern Morning News" from which we quote what follows: "When the other figures in the group are not required to show they have to be blocked out either on the original or on the negative. In the former case one of two methods may be used. The usual plan is to paint over the print with opaque colour before photographing. This has two serious disadvantages. First, in washing it off it is possible that the retouching done on the print will be washed off also; secondly, being on the same plane as the image itself, it is photographed sharply, and gives a very unpleasant appearance.

"A far better method, although one very little practised, is that of copying the print under glass and applying the colour to the outside of the glass. This not only gets rid of the excessive sharpness, but also prevents a hard line round the figure. Sometimes the blocking out is best done with a No. 1 retouching pencil, having previously given the glass a good coating of medium, but it is generally better to use Chinese white, to which may be added sufficient of the other colours to match the print, if desired, but this is not always necessary. In skilled hands it is even possible to introduce a new background in this way. The background is painted out white on the print, and then the new background is sketched on the glass. The advantage of this is that the body colour below is not disturbed by putting in the detail."



A Sentinel of Empire.

S. Sarna.

foreground. I don't say that the foreground of "The Fall" is pretty or well composed; it is neither, but it serves its purpose; it emphasises the mist and the background. "Woodland Waters" has no background. Why? For the obvious reason that it has no foreground.

"Smoke" is the blunt title of a tiny snap which again exemplifies this. The background of smoke would be almost meaningless, and certainly entirely un-



SNOW SHADOWS.

The original of this picture was No. 20 at the Exhibition of the Royal Photographic Society.

BY G. J. T. WALFORD.

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ADDRESS.—All communications for the Editor should be addressed: The Editor, PHOTOGRAPHY AND FOCUS, 20, Tudor Street, London, E.C.

TO CONTRIBUTORS.—The Editor will be glad to consider original up-to-date manuscripts on photographic subjects. All contributions must be typewritten, or in very legible handwriting, on one side of the paper only, and should bear the name and address of the sender. Letters or communications arising out of matters already appearing in the paper are not paid for. The Editor disclaims legal responsibility for the safety of matter submitted to him, but he will endeavour to return rejected manuscripts, etc., when a stamped addressed envelope is enclosed for that purpose. No notice whatever can be paid to communications without the name and address of the sender, not necessarily for publication.

PRINTS FOR CRITICISM.—Readers sending prints for criticism or advice are notified that in all cases it is understood that by so doing permission is given for their reproduction, without fee, in PHOTOGRAPHY AND FOCUS.

PRINTS FOR REPRODUCTION.—Reproduction fees are only paid by arrangement beforehand. The sending of a print, without any condition stated, will be taken as permission to reproduce it without fee. The Editor will be glad to consider for publication, with or without letterpress, photographs of special interest, on terms to be arranged.

PAYMENTS.—Articles and illustrations are paid for on acceptance.

INTERVIEWS.—The Editor will be at 20, Tudor Street, on Wednesdays, between the hours of 9.30 and 11.30 a.m., but can only be seen at other times by appointment.



THE HOVE CAMERA CLUB's exhibition, we hear, resulted in a good entry, and the lectures were well attended. The show has been financially as well as photographically successful.

THE HAMPSHIRE PHOTOGRAPHIC SOCIETY meets at the Old Lecture Room, Stanfield House, Prince Arthur Road. The honorary secretary, Mr. H. Nevil Smart, of 40, Compayne Gardens, West Hampstead, will be glad to hear from readers of *Photography and Focus* in the district, with a view to membership.

THE NORTHERN PHOTOGRAPHIC EXHIBITION. Preparations for this, which will be held in three fine rooms at the Manchester City Art Gallery next January, are now well advanced. There will be no trade section. Colour photography is to be strongly represented both by prints and slides, and the honorary secretary, Mr. S. L. Coulthurst, tells us he expects something special in Autochromes.

Books for . . . Photographers.

Photography for All.

By W. JEROME HARRISON, F.C.S.
Covers the whole ground of photography as practised in its most popular forms.
Cloth Bound 1/- nett. Post free 1/2.

Practical Slide Making.

By G. T. HARRIS, F.R.P.S.
All the different processes described at first hand by a practical slide maker.
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The Hand Camera and what to do with it.

By W. L. F. WASTELL AND R. CHILD BAYLEY.
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By W. J. WARREN.
A complete, practical, concise and well written treatise on what is the finest of the printing methods of pure photography, with facsimile developed and undeveloped platinum print.
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Photographic Recipes and Formulae.

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A full list sent on receipt of a postcard.
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20, TUDOR ST., LONDON, E.C.

THE LEEK PHOTOGRAPHIC SOCIETY has gone into new rooms in the Market Place. The honorary secretary is Mr. J. C. Miller, of Derby Street, Leek.

THE BURNLEY CAMERA CLUB holds its exhibition on November 19th, 20th, and 21st, entries closing November 12th. The prospectus and entry form can be obtained on application to the exhibition secretaries, Mechanics' Institute, Burnley.

SECOND-HAND APPARATUS. A bulky catalogue containing many bargains in cameras, enlargers, and photographic apparatus of all kinds reaches us from the City Sale and Exchange, of 26 and 28, King's Road, Sloane Square, London, W. It will be sent free to any of our readers on receipt of a postcard, and should certainly be seen by anyone contemplating a purchase.

THE TRAILL TAYLOR MEMORIAL lecture is to be delivered at the R.P.S., 66, Russell Square, London, W.C., on Tuesday, November 17th, at 8 p.m., by Dr. E. Wandersleb, of Carl Zeiss Optical Works. His subject will be "The regulation of the ray in a lens system."

THE RAJAR PRIZE COMPETITION. Rajar, Ltd., of Moberley, Cheshire, offer every month a Rajar quarter-plate folding pocket camera with anastigmat lens and unicum shutter for the best print or enlargement on any of the Rajar papers or postcards. There is only one condition, viz., that the goods must be purchased from a photographic dealer. All prints, including the winning ones, are returned if postage is included.

STEREOSCOPIC PRINTS. Mr. Howard, at the Melbourne Camera Club, said that it was advisable to use glossy P.O.P. for stereoscopic prints to avoid the spotty appearance so often to be seen in those prepared on a matt surface paper. It was advisable to avoid the photographing of flat objects, he said, or the result would be too like the ordinary photograph. As an instance, it was explained that it was useless to make a stereoscopic picture of a steamship some miles out from the shore unless there was some foreground to show its distance; this would not satisfactorily be conveyed by a smooth sea.

FLOWER PHOTOGRAPHY. Mr. Seymour, at the South Suburban Photographic Society, advised putting the flowers that were to be photographed near the background. This tended to emphasise the shadows, he explained, and so gave better modelling. When the flowers are placed too far from the background the shadows cast by them are lost. His own backgrounds were common paper—sometimes mere wrapping paper—but he always selected them with due regard to the colour of his subjects. Above all things, the flowers should not in the print be merged in the background.

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THE CHELMSFORD PHOTOGRAPHIC SOCIETY. Mr. Harold T. Cranfield having resigned, Mr. W. J. Morrison has been appointed honorary secretary.

× × × ×

THE SICKLE POSTCARD COMPETITION. Messrs. O. Sichel and Co. ask us to state that, owing to the number of complaints they have received that the time allowed is too short, they have decided to extend the closing date for entries for the first competition to November 30th.

× × × ×

ENLARGED NEGATIVES. Mr. J. T. Dyson at the Hull Photographic Society said he much preferred slow plates for this purpose to either bromide or negative paper. He used rodinal one part, water thirty parts as the developer, and was in favour of stand development. The transparency should be one full of detail, but not of that sparkle or brilliancy usually looked for in a lantern slide.

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THE HEATON AND DISTRICT Camera Club has just held a most successful exhibition. The challenge plaque was won by Mr. J. W. Gladson. In the open classes first awards were taken by W. W. Sanderson, Easten Lee, and A. G. Thistleton—a special award by B. Jackson; second awards by C. T. Cothay and Graystone Bird; special mention by C. T. Cothay; and honourable mention by Ellis Kelsey.

CONTROL IN OZOBROME. Mr. Manly, at the Chelsea Photographic Society, said that for a normal bromide print the pigment plaster should be left in the acid-alum bath for thirty seconds. A weak bromide print required less immersion, while a strong one called for from forty to sixty seconds.

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THE DUBLIN CAMERA CLUB has an annual subscription of five shillings, comfortable clubrooms, and a good programme. There must be many amateurs in Dublin who would join if they knew the club. The honorary secretary, Mr. G. Mitchell, of 68, Serpentine Avenue, Sandymount, will be glad to forward particulars.

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BROMOIL. Demonstrating before the Chorley Society, Mr. T. H. Greenall said that he first soaked the bromide paper for thirty seconds in formaline 50 minims, methylated spirit 5 ounces, and then allowed it to dry. He advocated time development with a fresh amidol developer (3 grains of amidol to the ounce). The print should be blacker than would be nice as a bromide, but the shadows must not be much flattened during exposure. It was not necessary to fix at this stage. The omission made not the slightest difference in the result, but it was necessary to wash out the developer for five or ten minutes before bleaching. If the print took longer than two

minutes in the bleaching bath to change from black to brown it was over-exposed in the shadows, or the bleaching solution was faulty. To prevent blisters he placed the print in half strength, and then in quarter strength hypo for a few minutes before washing. A good home-made pigment was artists' dry colour mixed with Japan gold size and raw linseed oil. This could be thinned with some essential oil. Sinclair's inks were very good and easy to work. He strongly advised a brush of considerable size, say, a Sinclair's No. 14 deer's foot, with another similar, but much smaller. Other brushes were a few penny camel-hair cut shorter in the hair, a spotting table or two, and two twopenny flat hog-hair fitches. The negative should be clear and full of detail, and a simple foreground subject chosen.

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THE CAMERA AT HOME. Mr. E. T. Holding, at the Ilford Photographic Society, laid great stress on simplicity of subject. One should not include every picture and mirror hanging on the walls because the dining room or drawing room has been made the studio for the time being. Obtrusive wall paper should be covered up with a sheet, which may be made the background. It is possible to photograph a model in a white dress against a white background and yet get perfect tone of gradation.

Houghton's Christmas Greeting Cards and Calendars.

THE list of Christmas card mounts which is issued annually by Houghtons, Ltd., of 88 and 89, High Holborn, London, W.C., is one which ought to be in the hands of every one of our readers who is thinking of getting any mounts to use for the purpose this year. It will be sent free to any amateur who cares to drop a postcard for it, and is recommended by us, not only for the great variety of very admirable cards with which it deals, but for the complete and clear way in which each card is described, and in most cases illustrated. It is a real guide for the buyer, who can comprehend its contents without having to learn the significance of trade terms.

The cards themselves are stocked by dealers all over the country, and so when the amateur has made his selection from the list he can purchase his supplies from local dealers in the ordinary way.

A batch of the cards has been sent to us by Messrs. Hough-

ton that we may note their nature in this column. We can only say that they are characterised throughout by the extreme of good taste, are fresh and novel in design, and excellently fitted for their purpose. They range in price from 8d. per dozen for neat paste-down mounts for promenade midget prints, up to 3s. 3d. per dozen for a charming four-leaf card with a circular opening nearly three inches in diameter to take a print "slip-in" fashion. We notice that in several of the designs the new linen-faced paper, which seems so effective a mount for photographs, has been employed, while there is a fine range of cards with rough or deckle edges, and others in which the air-brush has apparently been pressed into service in the decoration.

The list of the Christmas cards also includes particulars of the Folda border negatives, and of calendars for the New Year with openings in them for the purpose of receiving photographs. This is a list to be sent for.

Sinclair's Materials for the Oil and Bromoil Processes.

THOSE who are anxious to attempt the oil process, or its ozobrome modification known as bromoil, will do well to make quite sure at the outset that their materials are of the right kind. No one who has worked either will be inclined to dispute the fact that the quality of the brushes and the suitability of the pigments play a very large part in the success of the photographer, at least on its technical side; and it is just in the case of a process such as this, which is one for the *élite* rather than for the many, that the difficulty of obtaining materials and implements that are known to be of the right kind is usually most acute.

The oil pictures by Mr. James A. Sinclair at the exhibition which has just closed testify to the knowledge of the process possessed by that exhibitor, and it is perhaps well-known that Messrs. J. A. Sinclair and Co., Ltd., of 54, Haymarket, London, S.W., have hid themselves out to provide amateurs with materials for the process known to be of the right kind. They have also provided the necessary instruction in their use by the publication (price 6d.) of a little

book, "How to Make Oil and Bromoil Prints," by M. Demachy and others, in which Mr. Sinclair himself gives notes on his own experience of the process. The materials supplied by the firm include some excellent brushes, the genuine "putois pied de biche" recommended by M. Demachy. They are beautifully made, with a smoothly rounded dome top, which makes it very easy to secure an even regular action, and enables comparatively fine work to be done with a large brush. We have been using these brushes and the Sinclair specially prepared pigments lately, and found them admirably adapted to their purpose and a pleasure to use.

The pigments are very hard in character, and require working up on a palette with a trace of medium to suit them to the print that is to be inked, but only a trace of this is ever necessary.

The "encre machine" and "encre taille douce," used by Demachy, Puyo, and other French workers, are also supplied by Messrs. Sinclair, together with all the necessaries both for the oil and the bromoil processes.

SELTONA POSTCARDS

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GRADES.



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MATT SMOOTH. Fine medium carbon surface.
The grade for all-round work.

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OUR COMPETITIONS

BEGINNERS' COMPETITION.

Open to all photographers who have taken a course.

PRIZES.

First.—A signed copy of "The Beginner's Photography" by J. J. Langford, with a copy of the magazine, and in its place a certificate.

Second.—A year's subscription to "Photography and Focus" for twelve months.

Third.—A more certificate of honourable mention will also be awarded.

RULES.

1. Each competitor can send as many prints as he likes, but each print must be on the back the name and address of the sender, and the title of the picture, and no other writing whatever.

2. No print will be eligible that is not taken on a 10x12 postcard size or larger.

3. No print must be mounted.

4. No handwork other than simple retouching is permitted on negative or print, and no shading or dodging of any kind. It is absolutely understood that entry in the competition is a declaration by the competitor that this rule has been complied with, and in case of dispute, the editor shall have the right to call for the original negative, and the entry purports to be a simple direct contact print.

5. No prints will be returned, and no correspondence will regard to the competition can be undertaken.

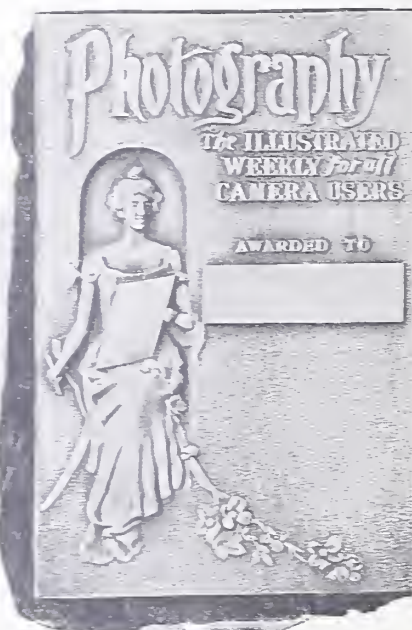
6. The publishers of "Photography and Focus" shall have the right to reproduce, without payment, any of the prints sent in, and to use the names of competitors in the competition, and any other material that may be reproduced without the competitor's consent.

7. All entries must be addressed "Beginners' Competition, The Editor of Photography and Focus, 20, Tudor Street, London, E.C., and must be delivered at that address by the first post on the closing date of the entry list.

CLOSING DATE.—Monday, Nov. 30th.



"Photography" Medal. Actual size.



"Photography" Plaque. Actual size.

Weight in silver over three ounces.

ADVANCED WORKERS' PRINT COMPETITION.

PRIZES.

First.—"Photography" Silver Plaque.
Second.—"Photography" Bronze Plaque.
Third.—"Photography" Bronze Medal.

One or more certificates of honourable mention will also be awarded.

RULES.

(1) All photographs must be sent addressed "Advanced Competition," the Editor of "Photography and Focus," 20, Tudor Street, London, E.C., postage paid, to reach there not later than the first post on the closing date, and must contain a stamped addressed envelope or label (not loose stamps if they are to be returned).

(2) Each photograph must be mounted, but not framed. Prints in slip-in mounts are not eligible. Each must bear on the back the name and address of the sender and the title of the picture. No letters or other communications must be enclosed with the prints. Every print must bear attached to its mount a coupon for the competition of the month, which will be found in each issue of the paper.

(3) Each photograph must be the work of the competitor as regards selection and arrangement of the subject, exposure and development of the negative, and printing, development or toning, and mounting of the print.

(4) The prints which are accompanied by stamped envelopes or labels will be criticised by post, and the editor shall have the right to reproduce any of the prints, winning or otherwise. The awards will be made a fortnight after the closing date.

(5) Awards may be increased or withheld at the absolute discretion of the judge, and in all cases of dispute the decision of the editor will be final.

(6) There is no restriction as to the eligibility, except as set forth in these rules, and except that the same negative must not be used more than once in the competition. That is to say, that a print from it once submitted, all further prints, however varied, are ineligible.

(7) Neither editor nor publishers of "Photography and Focus" shall be held in any way responsible for the safety of prints or for their return to the competitors.

(8) The sending of a print to the competition will be regarded as a declaration to the effect that it is eligible under these rules, and that the competitor agrees thereto.

CLOSING DATE.—Monday, Nov. 30th.

SPECIAL SUBJECT COMPETITIONS. OPEN TO ALL READERS.

PRIZES.

First Prize.—"Photography" Plaque in Silver.
Second Prize.—"Photography" Plaque in Bronze.
Third Prize.—"Photography" Medal in Bronze.
One or more certificates of honourable mention will also be awarded.

RULES.

1. The subject of each photograph entered must be that announced for the competition.

2. Each competitor can send as many prints as he likes, but each print must be on the back the name and address of the sender, and the title of the picture, and no other writing whatever. Each print must be attached to its coupon for the competition and the month, which will be found in each issue of the paper.

3. No print must be mounted. No handwork other than simple retouching is permitted on negative or print, nor shading or dodging of any kind. It is absolutely understood that entry in the competition is a declaration by the competitor that this rule has been complied with, and in case of dispute, the editor shall have

the right to call for the original negative from which the entry purports to be a simple direct contact print.

4. No prints will be returned, and no correspondence with regard to the competition can be undertaken.

5. The publishers of "Photography and Focus" shall have the right to reproduce, without payment, any of the prints sent in, winning or otherwise. But except the winning prints, the names of the senders of other prints that may be reproduced will not be published without the sender's consent.

6. All entries must be addressed "Special Subject Competition," the Editor of "Photography and Focus," 20, Tudor Street, London, E.C., and must be delivered at that address by the first post on the closing date at the very latest.

SUBJECTS AND CLOSING DATES.

A Domestic Interior. Closes Monday, November 30th.
A subject suitable for use as a Christmas or New Year Card. Closes Thursday, December 31st.
A Winter Landscape. Closes Saturday, Jan. 30th, 1909.
A Portrait by Artificial Light. Closes Saturday, Feb. 27th, 1909.

E. S. DONISTHORPE

CHALLENGES THE PHOTOGRAPHIC WORLD.

"I challenge any professional or amateur photographer to a contest of rapid photographic printing. My competitor may use any method he likes. I will use my new invention

The Donisthorpe Photographic Printing Block,

LUMINOUS AND EVERLASTING.

For this contest, I do not ask for negatives of exactly equal densities, specially prepared to suit my block—but any ordinary negatives. In fact, an ordinary Eastman Film with various exposures shall be used for this test. I shall be glad to hear from anyone who is prepared to take up this challenge."—EDMUND DONISTHORPE.

ONE WEEK'S TRIAL FOR NOTHING!

We are so **certain** that you will be delighted with this new invention, that we will send the Block, on approval, on receipt of price, to any part of the British Isles. Should you return the Block within one week—we will refund you the price **in full**, together with the postage both ways. The Donisthorpe Luminous and Everlasting Block **contains** the light required for printing; it gives you always the light that you are used to; it makes perfect prints every time; it does away with printing frames; and for rapidity it is without a rival.

PRICES.—Blocks for use with all sizes up to $\frac{1}{4}$ -plate, 1/6, post free 1/8; $\frac{1}{2}$ -plate, 2/-, post free 2/3; whole-plate, 3/-, post free 3/4.

Send for the Block **to-day**. You stand to lose nothing, and you will gain a lot. Anyway, you may as well keep up with the times.

THE DONISTHORPE PATENTS COMPANY, 100, Crampton Street, Walworth, London.

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SMALLEST, LIGHTEST, AND LATEST REFLEX CAMERA.

There is

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VIBRATION**

whatever when the shutter or mirror is released, a point that all reflex users will appreciate.

The quarter-plate size measures only 6 by 5 by $5\frac{1}{4}$ inches; complete with lens it weighs only 2½ lbs. It is therefore far and away the **smallest and lightest** reflex type of camera made. It is the **minimum** reflex. The focal-plane shutter is of novel design; one movement adjusts both the blind aperture and shutter tension, simply by turning a small knob. The speeds vary from $1/50$ th to $1/10000$ th second, and time exposures can also be made. The extension is very long, being twelve inches on the quarter-plate size. The rack focussing is let into the body of the camera, ensuring extreme rigidity of the front at fullest extension. The camera has reversing back.

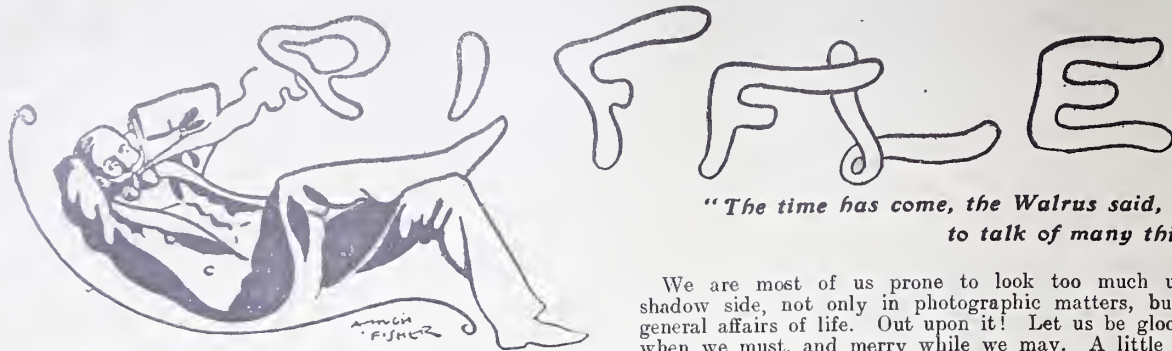


The Camera with Hood up and Front partly extended.

Our Second-hand Camera Department will be pleased to allow best possible exchange value for high-class apparatus to purchasers of Tella Reflex.

PRICES.—Camera and 6 slides only: $\frac{1}{4}$ -plate, £10 10s.; $\frac{3}{4}$ x 4, £17 15s.; Postcard, £17 15s.; $\frac{1}{2}$ -plate, £24. Fitted Ross Homocentric Series III. f/6.3 Lens: $\frac{1}{4}$ -pl., £14 15s.; $\frac{3}{4}$ x 4, £22 5s.; Postcard, £22 5s.; $\frac{1}{2}$ -pl., £29 10s. Prices with other lenses post free on application. Write for the book of the Tella Reflex.

THE TELLA CAMERA CO., 68, HIGH HOLBORN, LONDON, W.C.



*"The time has come, the Walrus said,
to talk of many things."*

IT is well known that within the last few months this paper has acquired many thousands of new readers, and I have often wondered lately what some of those new readers think of me and of this page. No doubt a good many have concluded that I must be a wealthy lunatic who hires this page week by week at heavy advertisement rates to give vent to his ravings on photographic topics. They are wrong. I have the honour to inform those who think me a wealthy lunatic that I am not wealthy.

* * *

Perhaps all dear old readers (bless their hearts) will bear with me while I weigh in with a few explanatory words for the enlightenment of more recent recruits. Some time in the dim past, when the world and I were much younger, our good editor determined to try the experiment of publishing for a time a weekly page of photographic nonsense. The first thing necessary was to find a fool to write it. He found me. As a matter of fact he found two of us, who were to write on alternate weeks; but in a week or so the other fool found wisdom and wrote no more. But I, alas, was so steeped in stubborn folly that I wrote, and wrote, and wrote, even as I am writing now. And this page is number 300 from my weary and reluctant pen. I happen to know that there are some who have read the whole of those 300 pages. They still live. When I wrote page 200 and would fain have cast away my pen and burnt my writing pads they actually encouraged me to continue in my abandoned folly. I remember their kind words to this day. I shall always remember them. So I set before my eyes the distant and doubtful goal of a 300th page, and, behold, I have arrived at it.

* * *

What a time it seems to look back upon—nearly six years! What changes have taken place! The wrinkles on my harassed brow have bitten deeper, and my few remaining locks have sadly frosted over. But I keep a stout heart and face the world merrily. In spite of a passing thought that I will write *Finis* at the bottom of this page I believe I have enough resolution still to set myself another goal. Suppose I try to make the number 365. That would be a brave number—a page for every day of a whole year. I haven't the heart to stop yet. When I wrote page 1 there was a small, soft individual, entirely bald and all but inarticulate, who has now grown long golden curls down her little back, and is in the habit of asking me when I am sitting at my desk whether I am writing *Piffle*. I always own the soft impeachment whatever I may be writing. I do not want to have to answer her guileless question with, "No, my pretty, I have finished writing *Piffle* for ever."

* * *

Besides, I am a shocking hand at saying Goodbye. It is a hateful word. If I wrote my last page I should really be saying Goodbye to a whole host of friends. For I have had abundant evidence that I have in every corner of these islands and in lands far beyond the seas such "troops of friends" as should glad the heart of any man. The things they say to me! The letters they write! It is a mercy that I know myself too well to be vain. But I am proud of having written this page for so long. Proud, not in any sense of foolish vanity, but because I have done good. I know that many times I have beguiled a sad face into a smile, and have bid dull care be gone from a heavy heart. And I am proud and glad to have done that. It is something to feel grateful for.

We are most of us prone to look too much upon the shadow side, not only in photographic matters, but in the general affairs of life. Out upon it! Let us be gloomy only when we must, and merry while we may. A little nonsense is good for all of us at times. We shall fight our battles none the less stoutly for having joined in a merry romp once and again. We may be as earnest as we like in our photographic work, and take it in all seriousness; but we may safely pause to chuckle at the vagaries of a sprawling tripod, to laugh at the humour of a photographic outing, or to guffaw at the performances of the omniscient novice.

* * *

Week by week I have tried to afford a glimpse at the light side of photographic work and the funny side of photographers, and we have had many a smile together, have we not? Sometimes I have had another aim in view, although it has been kept somewhat beneath the surface. I have tried to convey a real lesson in the guise of a jest. Ridicule is often a more potent weapon than either argument or invective, and a wrong may be slain by the barbed dart of a joke as easily as by the heavy bludgeon of a fierce denunciation. And altogether we have had a right merry time. No one is so keenly conscious as I am myself of my many failures and shortcomings. But I have never had to beg my friends to be to my faults a little blind. They have shut their eyes, and thoughtfully pretended still to be amused.

* * *

This is, I fear me, a very personal and over solemn page; but I felt that this particular moment was a suitable one to stand forth for a while without my jester's garb in full sight of old friends and new. I am hoping that I shall have a word from some of those new friends if I have had the good fortune to find any. Of my old friends I am sure. I know that they will send me just a word. I am sure of them. And to newer readers I think I may say on behalf of the editor and myself that "our true intent is all for your delight." So let me still babble on for yet a little while, if I may. Because some choose to look sourly on life shall there be no more cakes and ale? By my trusty pen, we will crack a joke or two yet, or there shall be conclusions. The bells on my cap shall ring another peal or so if shaking will do it, and my bladder shall make the welkin ring with many a resounding thwack. Look you, I will not lay down my pen! The beards of such of my friends as wear them shall still wag merrily, and the eyes of fair dames shall twinkle again. Away with melancholy! Give me my bauble and my motley suit; pass me the lute, for my fingers itch to tweak out another merry jig, and we'll all be gay together. I do remember another jolly song; I mind me of an untold tale. But just a moment. At the end of my 300th page, dear old friends and new ones no less dear, your hands!

THE WALRUS.

SUBSCRIPTIONS.

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Six Months	..	3 3	Six Months	..	5 5
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PHOTOGRAPHY. NOVEMBER 17TH, 1908

PHOTOGRAPHY

A JOURNAL FOR EVERY CAMERA USER.

EDITED BY R. CHILD BAYLEY.

PUBLISHED WEEKLY.

NOVEMBER 17TH, 1908. TUESDAY. No. 1,045. Vol. XXVI.



MY PET.

BY E. F. GILBERT.



Direct Enlarging upon Gaslight Paper.

Those who use artificial light for enlarging will find that gaslight papers are hardly practical, as the exposures required will be too long. But for daylight enlargers there is no reason why those who wish to do so should not employ gaslight paper instead of the more highly sensitive bromide paper. The chief advantage will be found when dealing with an exceptionally thin negative. It is well known that the ordinary grades of gaslight papers—that is to say, *not* the "portrait" grades—give a much pluckier print from a thin negative than does ordinary bromide paper. It is also well known that enlarging gives greater contrast than contact printing when negative and paper are the same. When these two methods are combined by making an enlargement on gaslight paper the very maximum of contrast from a thin negative might be expected. As far as the exposures in such a case are concerned, we notice that a writer in the "Belfast News Letter" states that, as a rough guide, it may be said that the exposure should be as many minutes as the Watkins meter takes seconds to reach the standard tint when placed alongside the enlarger. This assumes the enlarging lens to be working at $f/32$ and the negative to be one of normal density, free from stain.

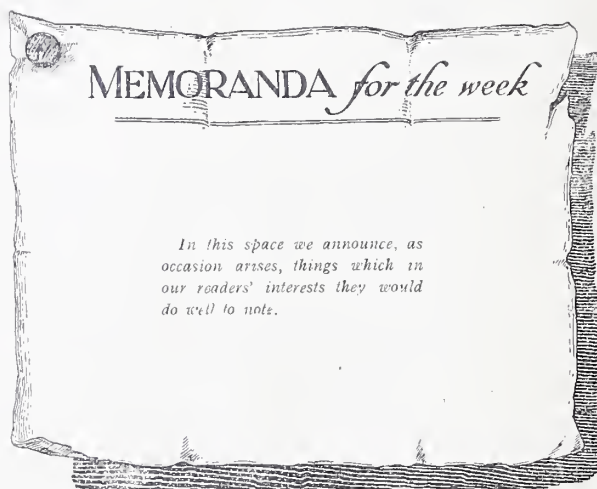
Slides on Loan.

The *Photography and Focus* prize slides, together with a number of the best in the competition which were purchased for the purpose, have been formed into a set which are now being circulated amongst photographic societies all over the kingdom. All applications for the loan of these should be sent to Messrs. Hiffe and Sons, Ltd., Lantern Slide Department, Coventry, and not to the London office of the paper, and should specify several vacant dates in the order of preference.

Toning P.O.P. and Permanence.

The article by the Editor, entitled "Sulphur and Permanence," which appeared in *Photography and Focus* for October 27th, has brought us a very interesting letter from Mr. Blake Smith, who takes exception to many of the statements which it contained. We endeavour to keep *Photography and Focus* free from theoretical discussions, and so do not publish the letter

or make any reply to it. Perhaps our readers will note that a great authority, probably the greatest authority on the subject, differs from us on many points, and will let it go at that. Most, however, will be glad to learn Mr. Blake Smith's views on the practice of toning. In the letter to which we have referred he says, "I cannot regard as anything but fantastic the warnings so often given as to letting fixing have plenty of time for completion. Never has a toned print faded because it was not properly fixed. Fixing occupies less than a minute, and toning always more than this. What people have come across is 'retained' silver and lead, which they have mistaken for the results of improper fixing. . . . I need say no more except that I do not advocate the use of a combined bath as a means of lessening the number of operations—which, properly used, it does not do—but as a means of obtaining good tones with fair certainty."



The Combined Lath Recommended.

In the early part of this year we published in *Photography* (February 25th and March 3rd) an article by Mr. Blake Smith, in which he described how to make and use a combined bath to which there was no objection. As many of the present readers did not then read *Photography* we may perhaps be permitted to repeat what was then given. The bath is made by dissolving an ounce and

a quarter of hypo and forty-five grains of alum in six ounces of *boiling* water. The use of boiling water is important. The solution is allowed to stand until it is cool, and then four grains of powdered lead acetate are added. It is put aside for twenty-four hours and is then filtered. To the filtered solution two grains of gold chloride in one ounce of water are added, and the bath is ready for use as soon as the gold colour has disappeared. A remark in the previous paragraph, to the effect that the use of the combined toning and fixing bath should not lessen the number of operations, may now be explained. Mr. Blake Smith advocates fixing the print first, in a separate hypo bath. They are put for two or three minutes in one and threequarter ounces of hypo and twenty grains of sodium carbonate dissolved in ten ounces of water. They are well washed and are then toned in the combined bath just mentioned, after which they are washed and dried in the usual manner.

Those of our readers who find any difficulty in the toning of P.O.P. prints would do well to try this comparatively simple and certainly reliable formula. It does not bring about a saving of trouble in the sense of a reduction in the number of the operations, but it is remarkably easy to use with success, and ought to solve the problem of gold toning for many who find most published formulæ difficult and uncertain. We should like to anticipate a certain number of enquiries by saying here that we are not able to state what tone this bath gives, although we have used it repeatedly ourselves. The tone depends on the make of P.O.P. employed, the vigour of the negative used, the depth of printing, and the extent to which toning is carried, and possibly on other factors as well. We ourselves have obtained very rich purple tones on P.O.P. with it, as well as the redder colours which are so frequently seen now.

Rumours of Another Exhibition.

We keep hearing rumours of another photographic exhibition which is to take place in London in the spring, during the London season in fact, and is to be an outward and visible sign of the inward disturbances which seem to have been troubling the members of the Linked Ring. Whether it will materialise is another thing, and in any case it can hardly be a serious rival to the Sa'lon and the New Gallery, for the very simple reason that accommodation for anything more than a very few pictures—as in the Coburn and De Meyer show—is not to be obtained in London at that time. Some are apt to overlook the fact that the R.P.S., for example, holds its exhibition in October not because it would not hold it in May if it could, but because it cannot get a suitable gallery then. In fact, most of the leading galleries have been put up expressly to provide a home for some particular exhibitions during the London season, and are only in the market for other parts of the year.

Luminous Paint and Photography.

The "Donisthorpe printing block," which we review elsewhere this week, recalls the Warnerke sensitometer—an ingenious piece of apparatus for measuring the sensitiveness of plates by exposing them to a standard light, the said light being provided by a tablet of luminous paint, excited by means of magnesium ribbon. In order that the light might be reasonably constant, it was found necessary to time the interval between exciting the tablet and exposing the plate, and careful experiment showed then that the light varied, the temperature of the air having a distinct effect. The Warnerke sensitometer is rarely seen now, apparatus more or less on lines laid down by Hurter and Driffeld having taken its place.

Snap Shots in Court.

Some of the illustrated papers lately have contained some quite remarkably good photographs taken indoors. Scenes in law courts, police courts, and the like, have been rendered extremely well, although those who figure in them were obviously not aware of what was going on at the time. It may be interesting to know that the Block Note camera has been largely pressed into service for these purposes, using it with the usual f/6.3 Zeiss lens, with which it is provided.

The tiny plates allow a correspondingly short focus lens to be used, so that everything that is seven feet or more from the camera is in sharp focus. The little negatives allow of being enlarged up to almost any size in reason, and provide the basis for most effective reproductions.

Pioneers of Night Photography.

One sees some strange things at times in the photographic columns in the lay press, and it is wonderful to find the most glaring inaccuracies calmly put forth as unquestioned truths. The "Evening Standard" provides a case in point this very week. After dealing with night photography in the London streets, it proceeds to refer to Mr. A. H. Blake as a "pioneer" of that form of work. We are second to none in admiration of the London pictures which Mr. Blake secures, thanks not only to his photographic skill but also to his unrivalled knowledge of the history and topography of the Metropolis. We do not for a moment suggest that Mr. Blake himself makes this claim. But that he can be regarded as a pioneer of night photography in the London streets, in any sense of the term, is quite impossible. It overlooks entirely the very striking series of pictures by Mr. Paul Martin which were shown at the Royal Photographic Society's exhibitions ten or more years ago (some were awarded a medal there in 1896). These were not isolated attempts, but quite a number were shown, extending over several years, and led to a great many other workers trying their hands at similar subjects, though not with so much success. If this kind of photography had a "pioneer" in this country that pioneer was Mr. Paul Martin, and it is only bare justice to his remarkable work that this should be pointed out. There is only too strong a tendency on the part of some of these young writers to assume that anything that the older hands know to have happened before their own acquaintance with photography commenced never took place at all.

OUR COMPETITIONS.

Readers are reminded that the following competitions are now running. All are open, without restriction of any kind, to every reader of the paper complying with the rules, which we print on the competition page nearly every week.

The Monthly Beginners' Competition.

For unmounted, unfaked prints. Prizes and Certificates.

Closes Monday, November 30th.

The Monthly Advanced Workers' Competition.

Prizes: A Silver Plaque, a Bronze Plaque, a Bronze Medal, and Certificates.

Closes Monday, November 30th.

Special Subject Competitions.

Prizes in each: A Silver Plaque, a Bronze Plaque, a Bronze Medal and Certificates.

SUBJECTS AND CLOSING DATES.

- A Domestic Interior. Closes Monday, November 30th.
- A Christmas Card Subject. Closes Thursday, December 31st.
- A Winter Landscape. Closes Saturday, January 30th, 1909.
- A Portrait by Artificial Light. Closes Saturday, February 27th, 1909.



The "Daily Mail" Committee on Spirit Photography.



EVERY few months there seems to be a recrudescence of the discussion on the so-called "spirit photographs," and the columns of the "Daily Mail" recently manifested one of these. Acting on the suggestion of Mr. A. P. Sinnett, a strong believer in the genuine character of some at least of these spirit manifestations, the Editor of the "Daily Mail" invited a number of gentlemen interested to form a committee to ascertain, if possible, whether any of these "spirit photographs" are what they purport to be, and whether "spirit photography" is possible.

The committee, which consists of three spiritualists and three photographic experts, held its first meeting last week, when the time was largely taken up by a discussion of procedure. The members were:

Photographic Experts.

R. Child Bayley
F. J. Mortimer
E. Sanger Shepherd

Spiritualists.

Robert King
A. P. Sinnett
E. R. Serocold Skeels

with Mr. Thome Baker on the part of the "Daily Mail." All were present with the exception of Mr. King. The committee decided not to consider any photographs unless those who produced them came forward to give evidence as to the conditions under which they were produced. Mr. Sinnett promised to bring before the committee at its next meeting a number of photographs he himself had obtained.

Whether the committee arrives at any definite result or not seems to be largely dependent upon the way in which it is helped by the spiritualists themselves. The attitude of the photographic members of the committee is one of scientific scepticism—the only possible frame of mind if their conclusions are to have any value. The denial of the possibility of such things would be a foolish position to take up, but there is a wide gap between admitting their possibility and regarding their production as an accomplished fact. It is to be hoped that the committee will be given an opportunity of making actual tests. Should this take place, and should any such manifestations appear on the plates exposed by the committee, it would be a testimony such as the spiritualists would surely welcome. Since if there is one point in all these discussions which comes out more strongly than any other, it is the total inadequacy of the precautions against fraud, which it is said have been taken. We do not suggest for a moment that the precautions have not been taken in all good faith, but in view of the ease with which the photographic plate can be affected by material means, and the extreme subtlety of many of the agencies which may be employed to affect it, the simple checks imposed by spiritualists with only a slight knowledge of photography furnish no guarantee at all.

The committee will no doubt see to it that if any plates are exposed at all, they are exposed under conditions as strict as can be devised.

THE WEEK'S MEETINGS.

MONDAY, NOVEMBER 16TH.

Lancaster P.S. "The Cause." J. W. Pickard.
Walthamstow P.S. Prize Slides.
Acton & Chiswick Poly. P.C. "Velox Paper." W. F. Slater.
Preston C.C. "Ozobrome." James Brunton.
Scarborough & D.P.S. "A Chat about Reptiles." W. J. Clarke.
South London P.S. Lantern Slide Competition.
Bowes Park & D.P.S. "Flowers." E. Seymour.
Stafford P.S. *Photography and Focus* 1908 Prize Slides.
Rodley F.C. & Bramley P.C. "Enlargements." Messrs. Mellor and Hartley.
U. Stereoscopic S. Spring Competition.
Bedford C.C. Club "At Home" and Competition Slides.
Bradford Grammar School P.S. "The Oil Pigment Process." C. E. Jackson.
Carlford & Forest Hill P.S. Competitions—Prints and Slides.
Bradford P.S. "On the Fringe of the Austrian Alps." C. B. Howdill.
Kidderminster & D.P.S. "Lens Making." Taylor, Taylor, and Hobson.
Southampton C.C. "Making and Toning of Gaslight Slides." W. H. Trigg.

TUESDAY, NOVEMBER 17TH

Epsom & D.L. & S.S. "Flashlight Photography." C. Zimmermann & Co.
St. Helens C.C. "The Oil Process." C. F. Inston.
Wimbleton & D.C.C. "Velox Paper." W. F. Slater.
Keighley & D.P.A. "Wells: Its Cathedral and Neighbourhood." A. Es Hasse.
Great Western Railway Lit. S. "The Victoria Falls." J. F. East.
Birmingham P.S. "Photographic Christmas Cards." E. G. Collins.
Hackney P.S. "Some Novel Lighting Effects." H. Essenhigh Corke.
Hanley P.S. *Photography and Focus* 1908 Prize Slides.
Sheffield P.S. "Genre and Figure Studies." T. Lee Syms.
Worthing C.C. "Enlarged Negative Making." J. P. W. Goodwin.
Chiswick C.C. "Some Ancient Abbeys and Churches of Essex." C. Forbes.
Nelson P.S. Members' Slides.
Padiham P.S. "Lilywhite Gaslight, and Bromide." J. E. Bayliss.
Blackpool & F.P.S. "Evolution of an Amateur Photographer." W. Brunt.
Monklands P.S. "A Chat about Lenses." Mr. Hossack.
Blackburn & D.C.C. "Picture Making." W. J. Pearse.
Leeds P.S. "The Oil Process." Rev. H. W. Dick.
Halifax C.C. "Thornton-Pickard Prize Slides." R. Hesketh.
Otley & D.C. & A.S. Prize Slides.

WEDNESDAY, NOVEMBER 18TH.

Borough Poly. P.S. Lantern Slide Competition.
Everton C.C. "The Production of a Newspaper." C. Coates.
Coventry P.S. "Bromide Enlarging." W. Riley.
Sheffield Friends' P.S. "Ozobrome." Horace Dixon.
Wolverhampton P.S. "Gum Bichromate Printing." H. Holcroft.
Woodford P.S. "Velox Paper." W. F. Slater.
Rochdale A.P.S. "Cameras, and how to use them."
Wimbleton Park P.S. "Framing Pictures in Passe-Partouts." J. Adams.
Leeds C.C. "Some Dutch Places and People." Arthur Marshall.
South Suburban P.S. "Habits and Homes of Rare Birds." J. C. Crowley.
Croydon C.C. "Intensification of Negatives." Walter Wood.
North Middlesex P.S. "Enlarging." D. Fox.
Sale P.S. "Other People's Children." R. F. Bishop.
G.E.R. Mech. Inst. "Lantern Slide Making." H. W. Bennett.
Huddersfield N. & P.S. "Warwickshire and the Wye Valley." C. Bingley.
Isle of Thanet P.S. "Principles of Composition." W. E. Tindall.

THURSDAY, NOVEMBER 19TH.

Hull P.S. "With a Camera in Italy." J. V. Saunders.
Southend-on-Sea P.S. Lantern Slides, to be judged on the screen.
Heaton & D.C.C. "Flashlight Photography." E. T. Robson.
Ilford P.S. Affiliation Slides.
Wembley & Sudbury C.C. "The Lens." Dr. Churchill.
Richmond C.C. "Velox Paper." W. F. Slater.
Brighouse P.S. "An East Coast Ramble." W. H. Atkinson.
Liverpool A.P.A. "Hints on Lenses for Photographers." F. W. Parrott.
Dublin C.C. "The British Empire." J. Hosie.
Ealing P.S. "Carbon Printing."
Handsworth P.S. *Photography and Focus* 1908 Prize Slides.
L. & P.P.A. "Telephotography." Ernest Marriage.
Weybridge & D.P.S. "Bromide Enlarging."
Small Heath P.S. "English Gothic Architecture." E. G. Collins.
Batley & D.P.S. "Platinotype." W. E. Fearnley.
Armley and Wortley P.S. "Stereoscopic Photography." Charles Grayson.
Cleveland C.C. "Hills and Dales of Yorkshire." G. Hepworth Brighouse.
Middletown P.A. Exhibition of Photographs. Subject—Landscape.
Leek P.S. "A Winter Holiday in Switzerland." H. A. Blades.
Aston P.S. "Thornton-Pickard Prize Slides." R. Hesketh.

FRIDAY, NOVEMBER 20TH.

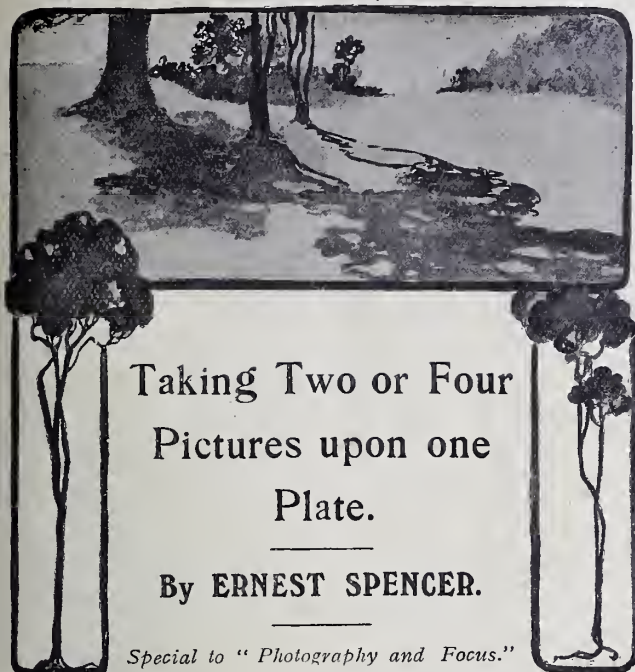
Sutton P.C. "Autotype Co.'s Carbon Process." J. Brabam.
Oliver Goldsmith P.S. Lantern Slide Competition.
West London P.S. "Velox Paper." W. F. Slater.
Edinburgh P.S. Meeting in the Dark Room.
Lincoln A.P.S. "What can be done with a Hand Camera." W. H. Green.
Birkenhead P.A. "A Few Hints on Picture Making." H. C. Allen.
Bromley C.C. "Carbon Printing." W. Clark Pettigrew.
Colne C.C. "Wellington Plates and Papers." H. Wade.

SATURDAY, NOVEMBER 21ST.

Photo Art Club (Aberdeen). "Bird Photography." Thos. Tait.
Ashton-under-Lyne P.S. Visit to Printing Works of E. Hulton & Co.
Bolton A.P.S. "The Rules of Composition." J. A. Grindrod.

MONDAY, NOVEMBER 23RD.

Lancaster P.S. Annual Exhibition.
Bletchingley and Nuthfield C.C. "Velox Paper." W. F. Slater.
Bournville and D.P.S. Demonstration. H. M. Cornthwaite.
Northampton N.H.S. and F.C. Lectures.
Preston C.C. "Boardoids." A. Kinder.
Cripplegate P.S. "Plates and Development for Printing Process." C. W. Coo.
Kidderminster and D.P.S. "Hints and Tips." A. Gordon Smith.
Bradford P.S. "Nature Poets and Nature Pictures." Percy Lund.
Bowes Park and D.P.S. Beginners' Class. Technical Demonstration.
Wallasey A.P.S. "Trimming and Mounting Prints." Rev. A. E. Parry.
Scarborough and D.P.S. "Elementary Enlarging." B. A. Kenny.
Oxford C.C. "Carbon Printing." Dr. Lyam.
Southampton C.C. "On the Fringe of the Austrian Alps." C. B. Howdill.
Stafford P.S. "Enlarging." A. L. Yapp.
Worcestershire C.C. *Photography and Focus* 1908 Prize Slides.



It does not appear to be generally known among amateur photographers that it is a simple matter to make two or four exposures upon one plate. I do not refer to accidental double exposures, for many of us make them often enough. What I mean are two distinct pictures upon one plate, each taking up one-half of it. The practice of taking two or more pictures upon one plate is not by any means a new one, and several methods have been suggested for doing it. I have at times tried them all, and the one I most strongly advocate is that

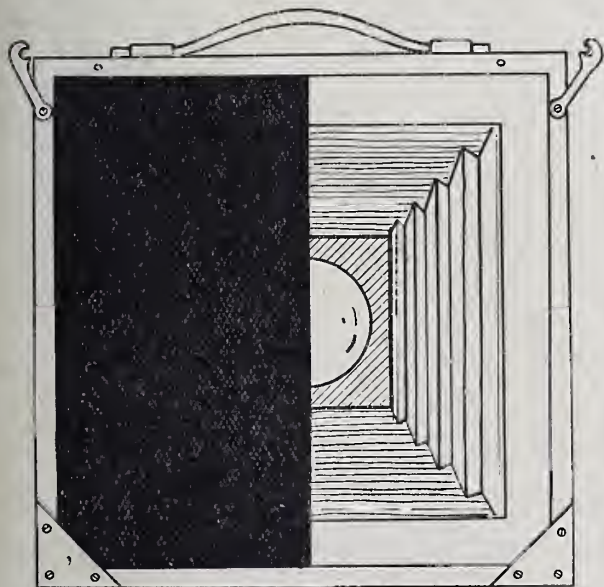


FIG 1

described below. — It is most certainly the cheapest and simplest, as a piece of card is all the material that is required.

The most suitable camera to use is one having a square reversible back; in fact, the method I am about to describe can only be adopted with such a camera. All that is then

required is a piece of black cardboard. Ordinary cardboard may be used if it is painted black. It is also essential that the card be as thin as possible and absolutely opaque.

The reversing back of the camera is removed and exact measurements taken, measuring the size from the rebate into which the back falls. It is impossible to give exact working figures, as the size of the square is not the same in all cameras. In my half-plate, for example, it is $7\frac{1}{2}$ in. square. The black card must then be cut to exactly half size (e.g., mine measures $7\frac{1}{2} \times 3\frac{3}{4}$) if it is desired to take two separate pictures upon a half-plate.

This card is then dropped into the back of the camera, as fig. 1, and the reversing back is put back in the usual way as if nothing had happened. If the card is thin the back will fit properly, but if the card errs on the side of stoutness the screws holding the catch plates and fasteners may have to be eased a little. If the back has been put in its place horizontally (landscape way) the appearance of the camera will be as fig. 2.

The camera is focussed in the usual way, the slide inserted, the shutter drawn all the way out, and the exposure

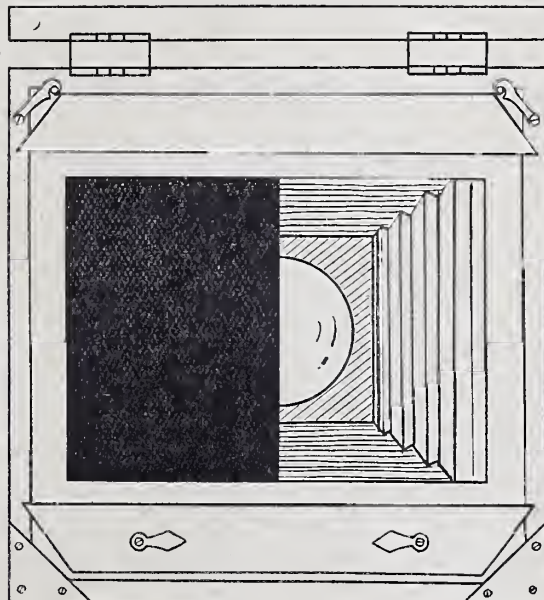


FIG 2

made. We thus get one-half of the plate exposed and the other half left blank, thanks to the card covering it. To make the second exposure all one has to do, after closing the dark slide and removing it from the camera, is to take out the reversing back and slide the card to the opposite side so as to cover the exposed half when the second exposure is made. The two pictures will then be as A and B (fig. 3).

One is not limited to pictures of this shape. By allowing the card to remain in the same vertical position, as shown in fig. 1, but putting the reversing back in a vertical or portrait way, we can get two pictures of the shape shown as G and H (fig. 3). If the black card is placed horizontally along the bottom, and then along the top, we can, by using the plate landscape way, get pictures of the shape E and F (fig. 3). If the card is used in the same horizontal manner and the back used vertically, our two pictures will be of the shape shown as C and D (fig. 3). Thus it will be seen that it is quite a simple matter to take two pictures on one plate, and the dodge will be found of immense value when plates are limited, or when a certain object is considered not to be worth a whole plate by itself.

Four pictures on one plate are as easy to take as two. The difference comes in the shape of the card. The black card is cut to fit the whole of the back exactly; one quarter is cut away as shown in fig. 4. The first exposure is made

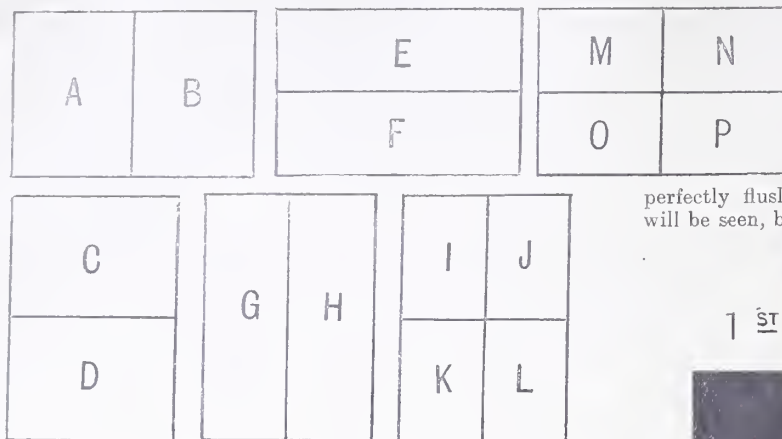


Fig. 3.

with the card in the position shown—that is, with its left upper corner open to the lens. The card is then turned round



Fig. 4.

so that the opening appears in the right upper corner for the second exposure, which finishes off the two top quarters of the plate. The third exposure is made with the open space at the left lower corner. The card is then reversed so that the opening comes at the lower right-hand corner. For these positions see fig. 5.

The shape of the pictures when four are taken on one plate is not regulated by the

position of the card, but by the placings of the reversing back, and, of course, the plate. The latter in a vertical position gives us four pictures as I J K and L (fig. 3), but if the reversing back is used landscape way the pictures will be horizontal, as M N O and P (fig. 3).

If the card is accurately cut and placed perfectly flush in the frame no overlapping of the pictures will be seen, but each will be properly joined up to the other.

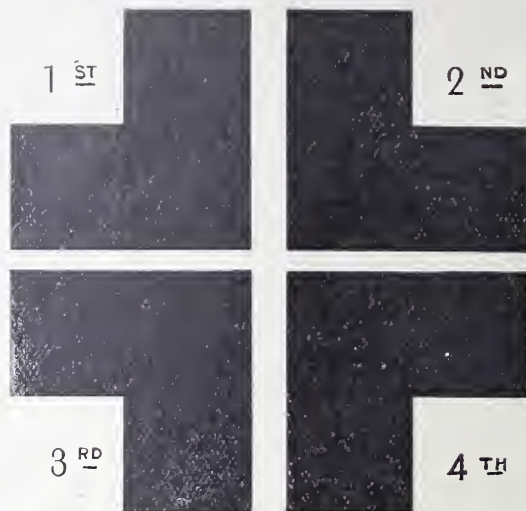


Fig. 5.

If the card is properly blackened none of the pictures will be fogged while others are being taken on the same plate, but each will be as clear and distinct as if taken on a plate by itself. The method is one of which the economy must be apparent to everyone who has to make a series of photographs where size is not very important.



Efforts by an Amateur.

HOW A LADY MAKES HER HOBBY PAY ITS WAY.

By Marion Whitten. Special to "Photography and Focus."



The problem of providing by means of the camera itself some at least of the money which is to be spent on photography is one which has confronted many of our readers, and is being dealt with by the series of articles now running under the title of "How I Make My Camera Pay." Here are the experiences of another reader, a lady this time, who has succeeded in making her amusement do even more than pay for itself. Our other contributor has relied chiefly on supplying magazines and journals with photographs. Mrs. Whitten, it will be seen, has found the most profitable side in postcard subjects for publication and in prizes. We hope from time to time to be able to give the experiences of other readers.

I HAVE just been reading a paper on "Home Portraits of Children" in the August 4th *Photography and Focus*. It has decided me to write to the Editor and tell him, and others if he prints my article, of my experience of the same subject.

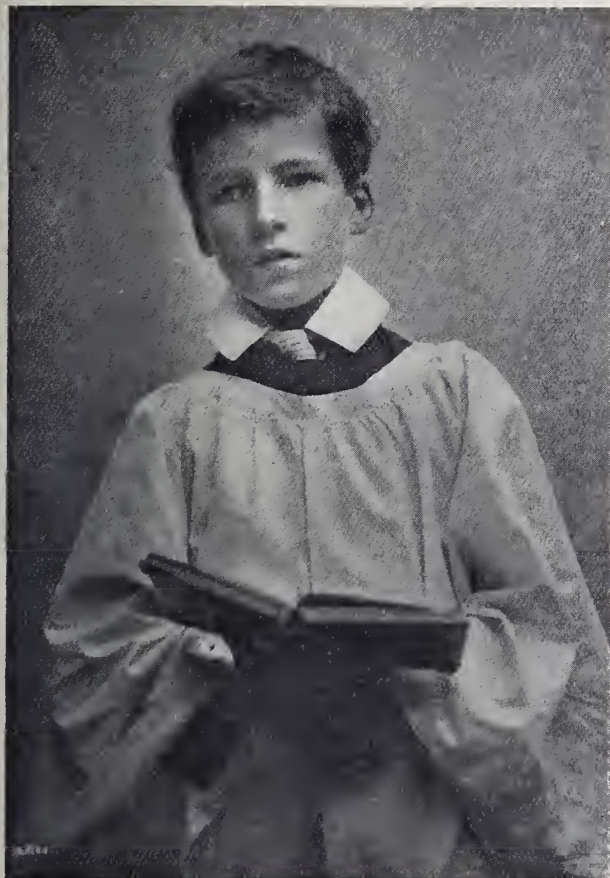
Three years ago I had a nice little camera given me, 5x4, with a good Aldis lens. Oh! the delight of that present! I had so often thought, "How I wish I could

take that, or that," when I had seen pretty poses of children; and I at once began on children studies, although I was told, "It's the most difficult thing one can attempt." Still my whole heart seemed turned to children and their pretty antics, and I made up my mind that I would succeed in the photography of them.

In the first three weeks I had taken over thirty negatives of the little ones in different ways. The camera was given to me in October, so it was not

a good time of the year to start, and I knew next to nothing about photographic methods; but I began to take in *Focus*, and I read and read and tried and tried and worked away, following the general rules laid down, until to my joy I found I was getting really good results far sooner than many of my friends had done. Of course I wasted heaps of plates; but still, was not the experience I was gaining worth everything? and considering how little I knew, my waste was not so very great. This I put down to the fact that I did not snap shot at anything I saw, but studied and arranged my model. I used my camera on a stand, was always careful to focus my subject, and at once began to specialise.

At the end of the first six months I took a photograph of my eldest boy in his surplice. Everyone praised it, saying what a good postcard it would make. I sent it up to a big



The Chorister. This was the first photograph I ever sold.

postcard firm, and by return of post I had an offer of 15s. for it. That was my grand beginning. From that time I began regularly to sell my prints of children for magazines and postcards. I am sending with this article three of my photographs to show the kind of work I have been lucky with. Now after three years' work I can find a ready sale for



*HOME FROM THE WASH.
This has sold both for use in magazines and as a postcard.*

it up because of the expense. And it is for that reason that I have written this to encourage others to specialise in some one subject as I have done, and to sell their work, and so to make their photography a profit as well as a pleasure. I am still very ignorant of the different processes and higher art of photography, and have only just begun on enlargements and carbon work.

I depend on *Photography and Focus* and the advice of one or two photographic friends to help me along, and I hope some day to do something worthy of being accepted at the Royal Photographic Society's Exhibition.



Saucy Nan. This has been sold many times.

this class of picture. I have won two prizes of £5 and £10 each, and have no difficulty in keeping my photographic expenses (and every photographer knows it is an expensive hobby) far under what I gain; so I feel free to enjoy my love for this work with an easy conscience, although I am the mother of seven children, and could not afford to spend money in this way unless it more than paid for itself.

Photography is such a gloriously beautiful pastime, so fascinating in every way, that it seems a pity so many have to give



High Speed Work.

Being the Presidential Address of Mr. J. F. Duthie
to the Edinburgh Photographic Society.



THE opening address of Mr. J. F. Duthie, president of the Edinburgh Photographic Society, dealt with the subject of high-speed photography. We give what follows as far as possible in Mr. Duthie's own words.

In selecting a camera for high-speed work, the first essential is a shutter which will give very short exposures. There are practically only two forms of shutter now fitted to hand cameras, which, for simplicity, I might term as the lens shutter and the focal plane shutter. The former is usually fitted between the combinations of the lens, and while it has the advantage of being compact and light, the lens is fully open for a fraction only of the whole exposure, so that this form of shutter does not allow the maximum of light to reach the plate. With the focal plane shutter, on the other hand, the lens is fully open during the whole exposure, and as the slit of the shutter passes across the plate, the part of the plate exposed receives the full amount of light passing through the lens.

It is impossible to draw a close comparison between the two forms of shutter, or to say exactly how much better the exposure will be with a focal plane shutter than with a lens shutter, but an exposure of $\frac{1}{200}$ th part of a second with a focal plane shutter would pass about the same amount of light as an exposure of $\frac{1}{50}$ th part of a second with a lens shutter, and the faster the shutter is used the greater will be the difference in favour of the focal plane shutter. Thus the focal plane shutter has a great advantage over the lens shutter for all classes of work, particularly when the exposures are of very short duration.

The next consideration is the lens, and it is of extreme importance. It must be capable of giving good definition much beyond the extreme corners of the plate, so that the rising front may be used with the full aperture of the lens. It must also be of large aperture to allow of very short exposures. These requirements can only be fulfilled by the modern anastigmats, which are made with apertures varying from f/4 to f/6.8, the former being preferable. It must be remembered, however, that depth of definition depends on the aperture and focal length of the lens, so some compromise has usually to be made between the two. While a short focus lens giving good depth of definition is to be desired, because the judging of distance by focussing has not to be so exact, it is objectionable because of its exaggeration of perspective. The longer focus lens, although requiring more care in focussing, and if carelessly used giving a larger proportion of fuzzy negatives, gives better perspective, allows the operator to be farther away from the object, and gives an image of a fair size on the plate. In much high-speed work it is far from desirable to be near the object. But the choice of the lens must depend to a certain extent on the kind of camera to be used, whether the folding or collapsable type with direct vision finder, or the bulky but more efficient reflex camera. Of the two I prefer the latter.

As a rule, for very high-speed photography, a meter is useless. It is usually a case of the largest aperture of the lens, and the longest exposure the velocity of the subject

will allow of. One exception to this, however, is yachting subjects, and here, owing to the much better light to be got at sea, a meter will often be found useful in deciding the best stop to use. The speed of shutter must be set according to the circumstances under which one is working, and they vary very much. In photographing from a pier or anything stationary, the points to be considered are the movements of the yacht, the distance she is off, and the length of focus of the lens.

For example, with a 5in. lens on a quarter-plate, or a 6½in. lens on a 5 × 4, an exposure of $\frac{1}{100}$ th to $\frac{1}{150}$ th part of a second will be ample, but, with the single combination of



ABOVE THE CITY'S TURMOIL.

BY FRANK W. GARDNER.

Awarded the First Prize in the Beginners' Competition for September.

the lens, $\frac{1}{200}$ th or $\frac{1}{250}$ th will be required. In photographing from a small boat or moving steamer, the speed of the shutter will require to be increased considerably. When arrangements have been previously made to photograph a yacht, or when photographing groups of yachts, it will be an easy matter to get them.

With chromatic plates, and others which have been fairly well exposed, I prefer a pyro-soda developer. The Ilford or Imperial formulæ I have found very satisfactory, but prefer to leave out the potassium bromide, unless I know the plates have been fully exposed. A

DEVELOPERS.

A cold developer is not only very slow, but fails to give the requisite vigour to a negative. The best temperature at which to use the developer is about 65 degrees, but where the plate has been very much under-exposed it will be found an improvement to use it even warmer than this.

From some photographs of runners at sports I have noticed

some workers prefer to take them from right in front. In a short race, where the competitors are well together, this is the best way of getting them all in focus, but to my mind it gives the figures a most unnatural appearance. I much prefer to take them from one side and a little ahead, as it gives a much better idea of action in the figure. The same applies to high jumping and hurdle racing. With the latter it is better to choose a hurdle near the start of the race, so as to have the competitors pretty well together, getting them all in focus, and thus conveying a good idea of keen competition. When photographing a golfer I think the best position is just before the finish of the swing. The club has a good bend on it, and there is usually an alert look on the face of the player. Another good position is when the golfer is playing out of a bunker, the sand that is knocked up often helping the effect.

To get good results of horses requires some study of the animals themselves, as the results to be appreciated must show good action. One should not attempt to take them with a short focus lens, coming towards the camera. In photographing yachts, also, it is better to have some knowledge of the handling of them. Taken from a bad position, with bad lighting, or with the sails not "drawing" well, it is an easy matter to make one of the finest boats look a mere "hulk." In fact, to get the best work when photographing most subjects, it is necessary to know the subject thoroughly first. The

focal plane worker more than any other must be alert, quick, and decisive, as usually the slightest hesitation on his part means failure.

When the time comes for making the exposure, the camera should not be clutched vigorously and a sudden jerk given to the shutter release, as it will simply mean vibration of the camera and a spoiled plate. One should not get excited, but hold the camera easily, and with a gentle pressure of the finger release the shutter. ("Transactions of the E.P.S.")



The Broken Net.

By John Wallon.



THE PYRAMIDS OF GIZEH.

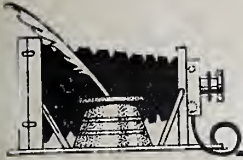
The original of this picture was No 34 at the Exhibition of the Royal Photographic Society, which has just closed.

BY W. CLARK PETTIGREW.

Focal Plane Triumphs.

Mr. Adolphe Abrahams at the Royal Photographic Society.

Specially reported for "Photography and Focus."



PSYCHOLOGY does not often obtrude itself at Russell Square, but Mr. Adolphe Abrahams in his lecture before the Royal Photographic Society the other night on the subject of his exploits in the athletic field with the focal plane shutter raised a question which promoted some discussion.

The question was, Does a photographer ever see events before they occur? It is not a silly season topic, although it looks like one.

Have you ever considered, he asked, what a complicated business is the taking of an instantaneous photograph? The eye is told to look out for a certain happening. When that happening takes place the eye has to send a message to the brain, the brain to the nerve, the nerve to the hand, and the hand to the camera. The human machinery works well and with the minimum of friction, but these operations are bound to occupy some time. This time is known as the latent period. By training one may diminish it, but it cannot be obliterated entirely. In the quickest people it takes one-tenth of a second.

Now, the photographer waits until he sees the event on the screen, and then makes the exposure. And yet he is in time to record on the plate the tennis racket hitting the ball, the racer breaking the tape, or whatever it may be.

Mr. Abrahams explained it by saying that with experience the photographer learns to visualise actions a fraction of a second before they occur. Owing to this anticipation of vision, the photographer is able, in spite of the fact that some time is taken up by the action of his nerves and muscles in conveying impressions and impulses, to get the exposure at the right instant. In one case he declared that he saw the tape broken before he pressed his release, and that the photograph showed the unbroken tape. "I was not quite normal," said Mr. Abrahams, amid laughter.

Mr. Abrahams's methods in focal plane photography are already familiar to readers of *Photography and Focus*, and little more need be said than to set out his remarks about various forms of sport:

FOOTBALL.—Association football is lacking in dramatic incidents, and there is not the effective grouping which one sees in the Rugby game. The best pictures are those which combine premeditation with the element of luck.

HORSE SPORTS.—These rarely present encouraging characteristics. The horses are generally so wooden. Moreover, the Englishman, unless he lives in a hunting county, has not the opportunity of studying equestrian skill which falls to the lot of the German or the student of horsemanship in the Italian cavalry.

CRICKET.—This calls for specialised knowledge, and, moreover, a man needs to be in touch with professional cricket, and have permission to snap at close range. For the ordinary amateur, the somewhat tame practice at the nets is generally all that falls to his lot.

RUNNING RACES.—The exposure should be made as centrally as possible in front of the players, not at the side, as was illustrated in *Photography and Focus* recently.

ROWING.—The beauty of the photograph depends on the number of rowers. The eight in the 60ft. boat make a fine picture, but four or two are objectionable, on account of the length of the bows. In photographing a boat from a bridge, it is necessary to use a long focus lens in order to get a sufficiently large picture.



SEA HORSES.

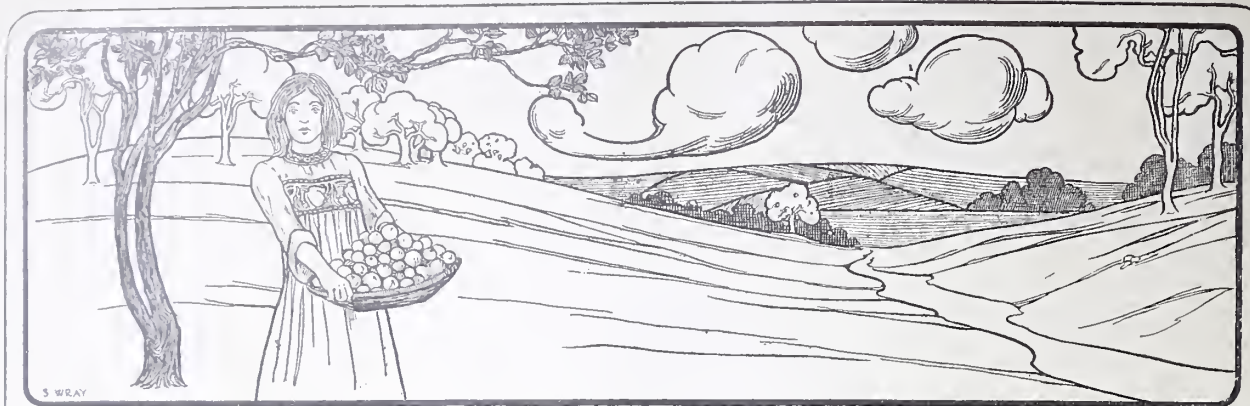
By CLARENCE PONTING.

Awarded a Bronze Medal in our Special Subject Competition.

HURDLE RACING.—This form of sport, together with jumping, putting the weight, throwing the hammer, and obstacle races, lends itself to focal plane work, although, in the case of hammer-throwing, photography at too close range is not to be recommended from the point of view of the personal safety of the photographer.

LAWN TENNIS.—Pictures of the game bringing in the four players are not very satisfactory, as a rule, and it is best to concentrate upon the attitude of one particular player. Sometimes a back or side view may be more effective than a front one, and express more thoroughly the energy of the player.

Mr. Abrahams's slides included examples of aquatic sports and golf, and in closing he suggested that one could acquire good practice in athletic photography by taking as one's subject a girl with a skipping rope. One might imagine that one-fifth of a second was a sufficient speed for such a study, but actually with a clever skipper the fastest speed of which the focal plane shutter was capable would have to be called into play.



THE LATEST IN APPARATUS & MATERIAL.

Enlargers by the Midland Camera Company.

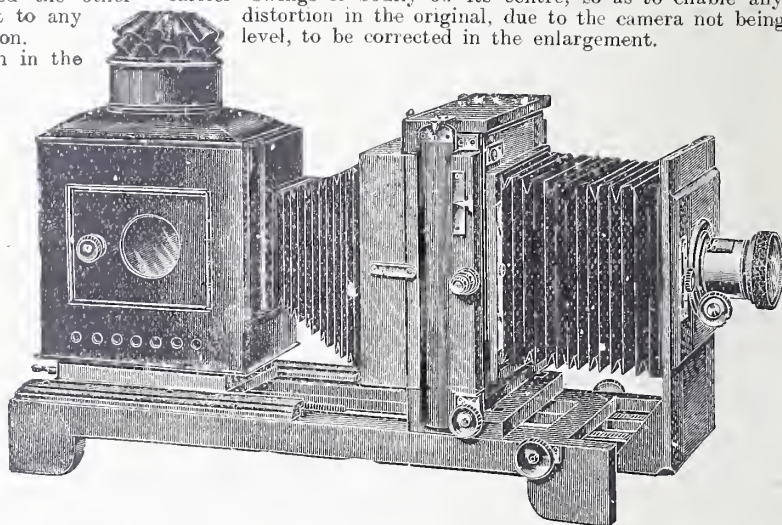
THE Midland Camera Co., of Slaney Street, Birmingham, is putting on the market for this winter a fine series of enlargers to suit all pockets, apparatus which is fully described in the little book "Enlargers and Enlarging," which we noticed the other day—a book the company will be glad to post to any reader of *Photography and Focus* on application.

One of the finest of the series is that shown in the illustration on this page, and known as No. 6. We have recently been enabled to examine one of these, and found it a wonderfully complete and well-designed piece of apparatus, one, in fact, which it was a delight to use. Every possible requirement of the photographer was provided for, and every adjustment which he could wish to make was there to his hand, to be done mechanically and with precision, while indicators showed him at once the extent of any such movement as he had brought into play.

The lantern body is of Russian iron, and is notably light-tight. It is fitted with Welsbach burner, unless some other illuminant is required, and its distance from the condenser is regulated by a screw, so as to be adjustable to a nicety. The body is connected with the condenser box by means of taper bellows, and a separate set of bellows connects the carrier with the front. The latter can be instantly detached from the carrier frame when for any reason it is desirable to get at the negative that is being enlarged without moving the carrier. The lens is fitted with an iris diaphragm, rack and pinion for fine focussing, and the usual orange glass cap. The front is extended by means of a rack and pinion in the usual way.

The feature of this enlarger is the carrier, which takes the negative, since it is provided with a remarkable series of adjustments, which cannot be very clearly seen in the illustration. One milled head raises or lowers the negative, by means of a rack and pinion. Another pinion provides a

lateral movement, while another enables the negative to be rotated to any extent, so that lines which are not horizontal on it may be brought horizontal on the easel without any difficulty. A pinion which can be seen at the bottom of the carrier swings it bodily on its centre, so as to enable any distortion in the original, due to the camera not being level, to be corrected in the enlargement.



The extension provided is so great that even in the half-plate size the apparatus may be used for reducing down to lantern slide size as well as for enlarging.

All these adjustments, while they make enlarging most luxurious, are not obtained at any excessive cost. Complete with lens and 5½ in. condenser for quarter-plate, the apparatus costs only £6 10s., with 6½ in. condenser for 5 × 4 or post-card size £8 10s., and with 8½ in. condenser for half-plates £10. Simpler forms are made costing as little as £2 5s., and the company also makes daylight enlarging apparatus.

The Donisthorpe Luminous Printing Block.

FOR the last few weeks an advertisement has appeared in our pages, in which the Donisthorpe Patents Co., of 11a, Iliffe Yard, Crompton Street, Walworth, London, S.E., has drawn attention to a novelty it was putting on the market under the name of the "Donisthorpe Luminous Printing Block." No doubt the somewhat mysterious character of the announcement has attracted the notice of many of our readers, who have wondered what manner of thing this printing block, for which so much was claimed, could be. Coming from the same quarter as the Donis-

thorpe printing process, it was only reasonable to expect something in the nature of a radical departure from the recognised photographic methods.

During the past day or two we have had some opportunities of using the printing block. It consists of a sheet of glass, backed up with some preparation on the lines of the well-known luminous paint. Such a tablet may be excited by exposure either to daylight or to some powerful form of artificial light, such as magnesium. This makes it self-luminous, emitting a pale bluish green light, barely enough

to enable the hands of the watch to be seen in the dark, but enough to make a fully-exposed print on bromide paper in a minute or so.

To use the block, the bromide paper is laid face upwards on a suitable support, the negative is placed on it, and the block, luminous side downwards, all in the dark room. The block is pressed down with the hand or by a weight of some kind for the required time, and is then lifted off and the print is developed in the usual way. The use of the block is perfectly simple, and it is quite easy to obtain correct and regular exposures with it, if a few points are borne in mind.

The instructions for its use are hardly sufficient to be a complete guide. The beginner who reads them will wonder how it is that, although the directions imply that the light is constant, they yet point out that the block gradually fades. The normal exposure is given as about thirty-five seconds, if the block has been exposed to daylight; eight minutes if it has been exposed to "a bright artificial light"; but these take no note of the very rapid diminution of the light emitted immediately after exposure of the tablet. If it is excited by means of daylight, it should be taken into the dark room half an hour or so before it is wanted for use. If this is done, the strength of the light it gives off will not vary perceptibly for a considerable time—hours, in fact. On the other hand, the light it emits when taken straight out of daylight will be found to be three or four times as powerful, as it will give off after the lapse of the first half-hour.

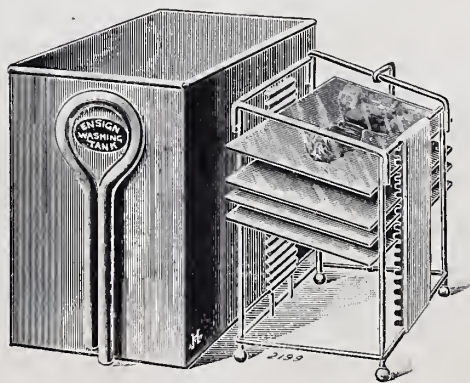
The advantages that are claimed for the Donisthorpe Printing Block are that it enables bromide printing to be carried out in the dark room without switching the lights on and off, it does away with the necessity for printing frames, rolls of film negatives may be printed without being cut up, simplicity from the standard character of the light used, economy in the lighting bill, etc., etc. The last is hardly a serious point, we imagine, as the cost even of the most expensive illuminant for bromide printing is never an appreciable item. The convenience of doing away with the turning up and down of a light in the dark room, with its temporary effect on the eyesight, is, in our opinion, the chief merit of the printing block, coupled with the undoubted convenience of being able to print from a roll of film negatives very readily. Used with care, as we have already shown, it should prevent spoilt prints from incorrect exposures.

The company supplies a special Donisthorpe Bromide Printing Paper for use with the block, and a Donisthorpe Developer. With ordinary bromide papers the exposure, it is said, must be much prolonged, and the result is not satisfactory. Our own trials up to the present have been made with the Donisthorpe paper, with which we experienced no difficulty in getting good results with the block.

The prices of the blocks are 1s. 6d., 2s., and 3s., for quarter, half, and whole-plate respectively, and the company offers to refund both the price of the block and the return postage if the purchaser is dissatisfied with it.

The Ensign Film-down Washing Tank.

IT has long been recognised that the most speedy elimination of hypo from the gelatine film on a plate is secured when the washing is carried out with the film downwards. This is due to the fact that the water which contains hypo in solution has a tendency to sink, and so to pass away from the plate, its place being taken by fresh water, which carries on the washing. The case, in fact, is strictly parallel with that which is pursued when hypo or any other crystal is to be dissolved. Everyone now knows that if the substance is tied up in a little muslin bag or otherwise supported at the top of the water in which it is to dissolve, solution takes place very much quicker than if it is simply allowed to lie on the bottom. This is the principle of the Ensign Film-down Washing Tank, which has just been introduced by Houghton's, Ltd., of 88 and 89, High Holborn, London, W.C., and can be obtained



from dealers all over the country at 3s. for quarter-plates, 3s. 6d. for 5 by 4, and 4s. 6d. for half-plates.

The tank, which is shown in our illustration with its rack removed, is made to hold eighteen plates, these being carried, film downwards, nearly, but not quite, horizontally. It is substantially constructed of zinc, without any enamel or coating of any kind. It is claimed for this that spots and marks, due to the chipping off of particles of paint, are avoided. The negatives rest on zinc corrugations, attached to "non-rustable" galvanised wire supports. The tank is provided with an automatic syphon of the usual kind, by which the hypo laden water is drawn off from the bottom at intervals, and the vessel emptied.

It will be seen from this description that the tank has been carefully planned to do what is required efficiently and quickly. It only remains to add that it is well finished and sturdily made.

Illingworth's Papers for the Oil Process.

SOME of the most successful oil prints that have been made have had as their basis the thick smooth white paper known as Illingworth's No. 125, and made originally for the double transfer carbon process. M. Demachy early discovered the suitability of the Illingworth double transfer papers for the oil process, and British workers have adopted them with complete success.

The particular paper in question has a very smooth opal surface, upon which it is comparatively easy to get fine detail and even tints. With suitable ink and brushes, the granularity which characterises a great deal of the exhibited oil prints can be entirely prevented, and that delicacy and quality which were so conspicuous in the work of Mr. C. F.

Inston at this year's R.P.S. Exhibition can be secured. We have recently been using this No. 125 paper, and found it very easy to work and very agreeable in character. It gives a class of print which is likely to commend itself to those to whom the broad sketchy effects obtained on rougher surfaces do not appeal. A packet of a dozen whole-plate pieces costs 10d., of 12×10 2s. As is customary with double transfer papers, each piece is cut to a size half an inch larger each way than the nominal size of the paper—9×7 for whole-plate, for example. This is very convenient in sensitising and so on, as it allows the margins, which may have been banded or marked by the pins when it was hung up to dry, to be trimmed off, still giving a full-sized piece of the paper.

Catching Drip from Bottle Necks.

Sir,—We have hit upon a method of obviating the objectionable drip which often runs down the label of a bottle after pouring. We had a difficulty in this respect with our time developer, and in many cases a drip from the neck of the bottle destroyed the lettering on the label and even the reading on the thermo-indicator, which indicates the time to develop at all temperatures.

We have now quite cured this defect by a band of several thicknesses of blotting-paper round the neck, which absorbs the drip and does not allow it to reach the label. It is true it gives the bottle a sore-throaty appearance, but that is better than a slobbered pinafore, and all our developer is now sent out in this way.

Yours, etc.,
THE WATKINS METER CO.



The Planets: Celestial Photography's Hardest Task.

A Wonderful Photograph less than a quarter of an inch in diameter.

THE planets are very near neighbours of ours when we compare them with the fixed stars. Mars at certain seasons is not more than thirty-five million miles away; yet of all the stars whose distance has been measured the very nearest is more than a million times as distant as Mars. Yet astronomers tell us that it is much more easy to photograph the stars than the planets.

The reason for this it is not difficult to understand. The most powerful telescopes that have ever been made only show the brightest and biggest of the stars as a tiny pin point of light. So distant are these worlds that it is almost unthinkable that any telescope can ever do more than show them thus. We can never hope to see a star of an appreciable area, much less to make out any detail upon it. The more powerful the telescope the brighter are these dots of light, and more of them can be made out; but dots they are to the naked eye and dots they remain in the greatest telescopes. Only the lenses of the telescope are imperfect and badly mounted do they appear as distinct discs instead of dots, and as soon as the imperfection is remedied the stars appear once more as points of light only. In a photograph of the stars, therefore, all the astronomer expects to get on his plate is a minute spot representing each star, enlarged by halation, perhaps, in the case of the brightest ones, but still a mere dot.

The planets are quite different in this respect. When a telescope is brought to bear upon them, they at once show as objects of a definite area, and if the telescope is only ordinarily powerful we may see details on that area. It does not take a very powerful glass to show us Saturn's rings, or the belts of cloud round Jupiter, or the snowy poles of Mars. And it is these details

which the astronomer wishes to get in his photographs, shown, if possible, with finer definition and with more detail than can be seen when the eye is applied to the telescope.

It will easily be understood that the requirements of the two cases are quite different. One of the greatest limitations of the telescope is the earth's atmosphere. A planet seen through a powerful telescope, which magnifies the effect of the air as well as the image of the planet, appears to tremble and to boil. It is as though we looked from the bottom of a pool of not very clear water and with its surface ruffled. This seething and quivering does not interfere so much with the photography of the stars, as given a long enough exposure the fluctuations due to the atmosphere neutralise one another to a great extent, and the image of the star

comes out as a dot in its right place. But this same disturbance applied to the image of a planet, on which we want to get actual details showing, is quite another thing; and it is, therefore, only under exceptionally favourable circumstances — perfect weather conditions, and an observatory high up on a mountain top, to diminish the thickness of the layer of air looked through — that a successful result can be obtained.

Yet some wonderful planet photographs have been secured; notably those of Mars which were shown at



Busy.

By HARRY L. BARFORD.

Awarded First Prize in the Beginners' Competition, August.

last year's exhibition of the Royal Photographic Society. Mars comes nearer to us than any other planet, but Mars is not very large. With a lens of twenty-five feet focus, Mars at its nearest to us only appears on the plate as a little circular disc one-twenty-fifth of an inch in diameter. By the use of a negative lens as well, making the whole arrangement a kind of telephotographic combination, a picture of Mars was obtained a little less than a quarter of an inch in diameter. Although Mars only shines by light reflected from the

sun, Professor Todd, who took out a telescope with an object glass eighteen inches in diameter, and mounted it 14,000 feet above sea level on one of the Andes, was able to get a fully exposed negative of the planet in fifteen seconds. While photographing the planet through such a telescope, its appearance is constantly changing, even when viewed through the rarefied air of the summit of the Andes.

So these pictures of Mars, the finest planetary photographs that have ever been taken, awarded the medal of the Royal Photographic Society, and discussed wherever astronomers meet together, are only little discs about three-sixteenths of an inch in diameter. They can be enlarged further, but nothing is gained by it, as the optical conditions are so severe that there is no more detail to enlarge.

Jupiter, although much farther away than Mars, is very much larger—so much so that by using a lens of sixty feet focus and magnifying the image five times a picture of the planet nearly an inch across can be obtained. Moreover, Jupiter is two and a half times as bright as Mars; that also helps. If each planet is to be shown the same size on the plate, Mars would require ten times the exposure of Jupiter.

Interesting as photographs of the planets must be, they have not been of much service to astronomy up

to the present. They cannot be said to have added to our knowledge of the heavenly bodies, as the photography of the stars has done. Eye observation still shows us more than the dry plate. One remarkable occurrence was revealed in one of Mr. Pickering's photographs of Mars taken in 1890. Mars, we may point out, is dazzlingly white at each pole, much as our own earth would appear seen from the same distance, and, although the conditions were very different, these are usually referred to as "snow caps." In Mr. Pickering's photograph the southern snow cap was clearly marked, but beyond it there was a dimly marked area of nondescript hue, not noticeable to the eye. Twenty-four hours later this area also was snow white, showing that the photograph had recorded the snowfall while it was actually taking place. It extended over an area as large as the whole of Europe.

The latest Mars pictures show the much discussed canals, and so confirm what had already been observed with the eye. They cannot be said to do more than this. Next year, however, Mars will not only be very near to us again, but will be higher in the heavens. It will therefore be seen through much less depth of atmosphere, and so, perchance, the pictures will tell us more.

REMARKABLE NATURE PHOTOGRAPHS.

II.—An Immense Wasp's Nest.



Interior of a huge wasp's nest that was taken from underneath the roof of a house.

By W. Sayers.



AN OLD ARCHWAY, BRUGES.

BY EDWIN MARKS.

The original of this has been awarded a Bronze Plaque in our Advanced Workers' Competition.

Imperial Plates

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TO CONTRIBUTORS.—The Editor will be glad to consider original up-to-date manuscripts on photographic subjects. All contributions must be typewritten, or in very legible handwriting, on one side of the paper only, and should bear the name and address of the sender. Letters or communications arising out of matters already appearing in the paper are not paid for. The Editor disclaims legal responsibility for the safety of matter submitted to him, but he will endeavour to return rejected manuscripts, etc., when a stamped addressed envelope is enclosed for that purpose. No notice whatever can be paid to communications without the name and address of the sender, not necessarily for publication.

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PRINTS FOR REPRODUCTION.—Reproduction fees are only paid by arrangement beforehand. The sending of a print, without any condition stated, will be taken as permission to reproduce it without fee. The Editor will be glad to consider for publication, with or without letterpress, photographs of special interest, on terms to be arranged.

PAYMENTS.—Articles and illustrations are paid for on acceptance.

INTERVIEWS.—The Editor will be at 20, Tudor Street, on Wednesdays, between the hours of 9.30 and 11.30 a.m., but can only be seen at other times by appointment.



THE PHOTOGRAPHIC CLUB is still in existence, and held its annual meeting on the 4th inst., at the Red Cross Hotel, Paternoster Square, London, W.C.

THE WHITLEY BAY CAMERA CLUB at its forthcoming exhibition proposes to give photographic books of reference as prizes, instead of plaques or medals.

STAINES AND DISTRICT PHOTOGRAPHIC SOCIETY. Mr. J. C. Fox having resigned the secretaryship, he has been succeeded by Mr. F. W. Memory, of 58, High Street, Staines.

WATFORD CAMERA CLUB. In the open classes, silver medals were awarded to W. J. Edmonds, A. Harris, C. H. Hewitt, and A. Taylor; bronze medals to J. Walton, Miss F. C. Vandamm, W. J. Edmonds, Graystone Bird, and E. M. Gladstone; while the work of C. H. Hewitt, A. S. Brookes, F. W. Memory, N. Blake, W. H. Cox, A. Roffey, W. R. Gunton, J. Maddison, J. Walton, W. J. Edmonds, G. A. Booth, Capt. W. J. Stomm, and A. D. Thompson received honourable mention. The gilt plaque in the Champion Class was won by L. J. Steele.

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THE ALTRINCHAM PHOTOGRAPHIC SOCIETY's honorary secretary is now Mr. E. J. Middleton-Guimaraes, of Thorn Bank, Cambridge Road, Hale, Cheshire.

A POSTAL CORRESPONDENCE CLUB "for young and enthusiastic amateur photographers" is being formed. The honorary secretary, Mr. S. Rubery, jun., of 49, Lonsdale Road, Wolverhampton, will be pleased to supply full particulars.

"TRAVEL AND EXPLORATION" is the title of a new monthly magazine, price 1s., which is to appear on Jan. 1st, and to be fully illustrated with photographs. The publishers are Messrs. Witherby and Co., of 326, High Holborn, London, W.C.

THE MIDLAND FEDERATION of photographic societies now includes no fewer than forty-three clubs. It has provided forty lectures before sixteen societies, and has circulated a portfolio and slides, organised a united excursion (to Oxford), and done a surprising variety of useful work on the small revenue of sixteen guineas. The honorary secretary is Mr. Lewis Lloyd.

THE INVENTION OF OIL PRINTING is ascribed to Mr. Rawlins by Mr. Arthur Marshall, writing in "The Bibliophile." Mr. Rawlins undoubtedly resuscitated and popularised a forgotten method, but he certainly did not invent it, and we do not know that he has ever claimed to do so. The article has a number of excellent reproductions of some of Mr. Marshall's very attractive pictures.

ATTENDANCES AT THE NEW GALLERY. Mr. McIntosh, secretary of the Royal Photographic Society, informs us that 15,621 persons passed the turnstile in 1908, as compared with over 22,000 in 1907, and 15,229 in 1906, which two years were the best on record previously. If the visitors at the Private View and Soirée are also counted, says Mr. McIntosh, the total number this year is considerably over 18,000.

WARM TONES ON LANTERN SLIDES. Rev. H. O. Fenton, lecturing on slide making at the Catford Society, advocated exposing for one minute at two feet from an incandescent burner, and then developing for five minutes with

Rytol	...	1 tabloid
Ammonium bromide	(10 per cent.)	40 minims
Ammonia .880	(10 per cent.)	30 minims
Water to	...	2 ounces

He also recommended exposing for two minutes and developing for six minutes (for normal negatives) in the following developer:

Pyro (ten per cent.)	...	15 minims
Ammonium bromide	(10 per cent.)	40 minims
Ammonium carbonate	(10 per cent.)	40 minims
Ammonia .880	(10 per cent.)	30 minims
Water to	...	2 ounces

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A CAMERA CLUB FOR FOLKESTONE has been formed. Mr. G. H. Sheaff, of 15, Julian Road, Folkestone, is the hon. secretary *pro tem.* and will be pleased to supply full particulars to anyone interested on application.

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PHOTOGRAPHIC CHRISTMAS CARDS. The Rotary Photographic Co., Ltd., of 12, New Union Street, Moorfields, London, E.C., is issuing sensitised Christmas Greeting Cards in P.O.P., self-toning, and gaslight emulsions.

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PRESS PHOTOGRAPHERS at the trial of Mr. Charles Wyman Morse, the so-called "Ice King," came in for some rough treatment. Mr. Morse has a rooted objection to them, and on leaving the court assaulted one of them and smashed his camera.

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Mr. J. L. NEWMAN. We learn that the connection of Mr. Newman, to whom the photographic world owes some of the most important inventions in hand camera construction, with the well-known firm of Newman and Guardia, Ltd., has just terminated. Kinematographic apparatus is, we believe, the latest to have his attention.

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TELEGRAPHED PHOTOGRAPHS. To test the value of the Korn apparatus in Denmark and Sweden a curious experiment was tried the other day by two of the papers in Stockholm and Copenhagen respectively. Each telegraphed to the other a portrait of a journalist in the city to which the picture was sent, the pictures were re-produced, and the public invited to make the attempt to detect the individual by means of the newspaper portrait. In each case, we read in the "Daily Mail," the original was found in about half an hour after the hunt commenced.

CATALOGUES. Messrs. Marion and Co., of 22 and 23, Soho Square, London, W., send us a substantially-bound, fully-illustrated price list of photographic apparatus and materials, containing over 200 pages. A smaller list has also been issued by the same firm.

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THE WHITLEY CAMERA CLUB at its annual meeting elected the following officers: President, J. M. Botham; vice-presidents, W. Brown, J. Bruce, G. Wright Hodgson, and E. Hall; committee, T. Newbitt, E. E. Roberts, A. G. Gray, H. S. Horne, W. Ruff, J. T. Ross, and A. B. Lickley; judge, F. M. Sutcliffe; lanternist, E. Hall; assistant lanternist, A. B. Lickley; and honorary secretary, Woodhouse Parkinson.

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COMBINATION PRINTING was the subject dealt with by Mr. G. L. A. Blair in his lecture before the Midlothian Photographic Association last week. Mr. Blair's method was first to get a combination print on P.O.P. from two or three negatives, and from this print to make a new negative from which the final prints were made. The new negative provided opportunities for modifying the tone values of the different parts, and generally for improving the result.

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THE HACKNEY PHOTOGRAPHIC SOCIETY'S exhibition was held on November 4th, 5th, 6th, and 7th. The gold medal for the best picture was won by John Hepburn. In the open classes silver medals were won by C. Wille and W. A. I. Hensler; bronze medals by Oscar Hardee, W. Chater Lea, Miss Marillier, A. Taylor, and W. Rawlings; bronze statuettes by G. Coatsly and H. W. Fitch; while C. F. Morgan, A. F. Hirschfeld, W. A. I. Hensler, G. C. Laws, and E. Burton were highly commended.

A DAMAGED DARKROOM. A photographer took a portable darkroom by rail, booking it at a cheap rate as a "pram." The darkroom was placed in the guard's van, but got damaged, and the L.T. and S.R. Co. were sued for £5, the amount of the damage. Judgment was given for the railway company, the specially low rate charged being held to relieve them of responsibility.

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MULTIPLE GUM. Lecturing before the Leicester Society, Mr. J. C. Batkin said that he employed the multiple variation of the gum-bichromate process. Greater depth and a greater range of tones could be secured by its aid, while if the re-pigmented paper was allowed to become absolutely dry before replacing it in the printing frame, the securing of exact registration is not a difficult matter.

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LANTERN SLIDES. We have received from Mr. Graystone Bird, of 38, Milson Street, Bath, a collection of his latest lantern slides, which are described in a supplementary catalogue that he has just issued. The slides are all characterised by that admirable technique which we have long been accustomed to see in all Mr. Graystone Bird's work. As slides they are models of what lantern slides should be, clear, of excellent colour and perfect definition, yet never harsh or crude. There is a softness and gradation in them all from which the average commercial slide is painfully free. In fact, these slides are more like the best amateur work than any we have seen on the market, and have brought their exhibitor many awards in open competitions. The series includes landscapes, genre pictures, single figures, illustrated hymns, and winter, sky, and sea effects, and should certainly have the attention of slide buyers.

Dr. Traube's Patent Dye Toners for Lantern Slides.

THE toning preparations which bear the above name are a distinct novelty in slide making, and are likely to prove to the taste of a great many amateur photographers, to whom the existing methods of toning slides are not all that they require.

The process of toning with them is quite a simple one. The finished black tone slide is placed in solution, which is made up by dissolving the contents of a sealed tube in seven ounces of distilled or boiled water. The solution seems to keep in working order for some time, and is capable of being used for a large number of slides. The slide may be placed in it wet or dry, and soon begins to bleach; in less than five minutes the image has whitened right through, the silver being converted back into a haloid, much as is done in sulphide toning. The slide is then washed for two or three minutes, until the water in which it lies is quite clear, and is then ready for dyeing.

A second tube contains six tablets of as many different coloured dyes. Each tablet is dissolved in four and a half ounces of tap water to which a dram of acetic acid, which is supplied with the dyes, has been added. These dye baths are also capable of being used repeatedly, and will dye a great many slides.

The lantern slide, bleached as above, is merely placed in the dye and allowed to remain there for five minutes, when it will be found to have taken up the colour, and only needs a final wash to complete it. This washing is best done under the tap, and if it does not make the high lights quite clear and

free from stain, the slide may be placed for a little while in a dish of water to which a little of the acetic acid has been added. When this has cleared it sufficiently, it is rinsed and dried. The acetic acid bath we only found to be necessary occasionally, the washing being usually all that is required to clear the slides effectively.

The colours obtained in this way are singularly clear and transparent, and there seems to be none of that tendency to clog the shadows which most slide-toning methods manifest. Viewed in the hand, the colouring is very deceptive, and appears quite different from that which shows itself in the lantern. We mention this to prevent anyone from misjudging the colours from such a cause. Some of them seem very crude in the hand, yet in the lantern they lose all this and look rich and effective.

The toning outfit is put on the market by Messrs. J. Griffin and Sons, Ltd., of Kingsway, London, W.C., price 4s. 6d. the set. Messrs. Griffin state that they have found that slides on certain makes of plates are not capable of being toned satisfactorily by this process, and that they have therefore adapted their own plate—the Gaslyt lantern plate—to the method. Certainly slides made on the Gaslyt plates take the toning process very readily, and the plates are very convenient to use; but we tried the dyes on a number of slides made, some on gaslight plates and others on the more sensitive lantern plates, and succeeded in getting good colours every time. The process ought to become a very popular one this winter.

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Queries and Replies



REGULATIONS.—(1) Envelopes must be marked "Query," and the "Enquiry Coupon" found elsewhere must be enclosed. (2) The full name and address in addition to a *nom-de-plume* must be given. (3) Only one

question on one subject is allowed in each letter. (4) Prints may be sent for criticism, but a separate coupon must be sent with each print, and a stamped addressed envelope (not loose stamps) for their return. Queries are dealt with in strict rotation in the order received. Only "Urgent Apparatus" queries will be dealt with by post, for which purpose a stamped envelope must be enclosed.

F. A. HAIGH (Rugby).—The one we tested had none, but we have seen others which had it.

J. FARRELL (Stockport).—It was due to a misunderstanding and was put right on page 547 last week.

RICHARD HOGAN (Limerick).—It must be made fresh every time, as it will not keep for more than a day or two.

PLANTO (Uckfield).—You overlook the fact that as each one changed it pushes the next one forward to take its place.

TRIPOD (Clapham).—As no clouds are to be seen above the trees, all sky having been trimmed off, we do not understand your enquiry.

W. BIRCHFIELD (Doncaster).—No, the exposure varies as the squares of the equivalent foci. As these are approximately 2½ and 4, the exposures would be 1 second, 2½ seconds, and 4 seconds respectively.

W. O. E. MEADE KING (Maidenhead).—The question was fully answered on page 505 of *Photography and Focus* for October 27th. You can get all the details you require from that with nothing more than ordinary simple arithmetic.

H. FAIRBROTHER (Rochdale).—There should be no such risk at all provided the lantern is properly ventilated and the lenses of the condenser are quite loose in their cells. We have used the combination for ten years and have had no trouble at all.

JIM (Tyronet).—We suspect underexposure; but you had better repeat your enquiry, sending a print, and, if possible, a negative also, carefully packed, and we will do what we can to assist you. We are very glad to hear you find the paper "most helpful."

A. KIRBY (Brighton).—You will not be very far wrong if you assume that the Watkins is double the H. and D. number. We do not know what you mean by "I want them so as to use any developer." There is no connection in practice between the speed number and the developer.

LENS (Tredgar).—The values depend on the size of the lens. Your only plan is to write direct to Messrs. Dallmeyer at Neasden, giving them the registered number of the lens engraved on it, and repeating your enquiry, enclosing a stamped envelope for reply.

GRIFFIN (Seaham Harbour).—Its list price was £12, but we doubt if it is worth one-third of that in the market now, as more modern patterns by the same and other makers have very largely taken its place. It is admirable for portrait work, especially in a short studio.

P.T. (Soho).—Any colour screen would do, it is only a case of getting a suitable fitting to carry it. We should take the camera to the maker or to a dealer and enquire what fitting he can supply for the purpose. We do not understand your second enquiry. Please repeat it, telling us exactly what your difficulty is.

SUFFRAGETTE (Cardiff).—Two other cases of these blisters have come before us, and in neither did they show at all in the printing, so we should not advise you to attempt to remove the film—a process which would certainly involve great risk of injury to the negative. If it must be done we can only suggest soaking in cold water and rubbing; but we should not like to try it.

S. M. LUCKOCK (Bordesley).—We could no more tell you the exposure for a bonfire than we could tell you the size of a piece of wood. All you can do is to try. You will get a result with anything from ten seconds to half an hour; none will have detail in the shadows, so that by that standard none will be properly exposed. Which of the lot will give you the result you want we cannot say.

T. M. PARKER (Crouch Hill).—Fabric can be rendered practically not inflammable by dipping it in the following solution and then drying it:

Ammonium phosphate	1 ounce
Ammonium chloride	2 ounces
Water	15 ounces

It will be well to test it afterwards by putting a match to it.

MICRU (Dorking).—We sympathise with you, and never suspected you had so good an excuse. The circles are due to minute spots of light coming through the trees but not focussed sharply by the lens. Halation is not the cause. If you focus on the trees they will no longer appear as circular discs, but as spots of the correct shape. The print you send has halation all round the child's dress, and in the sky, and is clearly from a much over-developed negative.

C. H. TONKIN (Bath).—Houghsons, Ltd., 88 and 89, High Holborn, London, W.C.

GUY FAWKES (Selly Park).—In our own case we should rest satisfied with the one and not make the change.

CAMERA (Aylesbury).—No satisfactory method of getting the usual P.O.P. tone on glossy bromide paper has been worked out. We think you must be under a misapprehension as to the trade printers.

N.W. (Woking).—The lens you have could not be improved upon for copying. We presume your camera will extend far enough to enable you, with it, to get your copies on as large a scale as you desire.

H. HIRST (Brighton).—We have an article in type which answers your question fully. In the meantime, why not use the formula recommended by the plate maker whose plates you use? You cannot beat it.

N.W. (Woking).—If you propose to make the paste yourself, there is nothing to beat plain freshly prepared starch paste, made fairly stiff and used as soon as it is cold. It should consist simply of starch and water.

FERRO-PRUSSIAN (Romford).—It is impossible to say what the bottle contains. There are a number of sensitising solutions containing "ferro-prussiate." It is a very cheap salt, and we should advise you to pour the liquid down the sink.

BETA (Hove).—Certainly plates can be fixed as well as developed in the "Standa" tank; we invariably use it in this way. No preliminary immersion in water before development is required. The tank must be well washed after using hypo in it, but this is not difficult.

INQUIRER (Belfast).—Your enquiry is hardly clear enough. Prints may be copied quite successfully by ordinary lamplight or incandescent gas without the need for anything in the shape of special apparatus. Write us again if you want more than this, describing fully what you want to do.

ARTHUR CONWAY (Windsor).—Zeiss Double Protar, costing for quarter-plates (5in. focus) £7 15s. It is well not to expect too much in the way of "snapshots in dull weather" even from the best lens. More depends on the length of exposure you can give and on avoiding trying subjects.

RUSTICS (Warrington).—We do not see that the toning and fixing had anything to do with it, and believe the make of card to be at fault. Any defects due to improper toning or fixing, in the case of so substantial a support for the emulsion as is this, we should certainly expect to see on the front and not on the back.

SNAPDRAGON (Watford).—We have sent back your negatives. There is nothing the matter with them except under-development. For some reason or another they have not had sufficient; possibly the developer was too cold. When intensified with mercury they should give good prints, except for the rubbing marks on one of them.

AMERICA (Brighton).—Unless the work is quite out of the common, we doubt if you will be able to find a market for it. Your best plan would be to study the illustrated papers and see what kind of pictures each is in the habit of using. No useful purpose could be served by giving "a list of papers which publish amateur photographs."

J.H. (Hull).—You might try soaking it for half an hour or so in the following, but we doubt very much if the stain can be removed at all:

Sodium sulphate	20 grains
Citric acid	5 grains
Water	1 ounce

G. F. CLIFFORD (Forest Hill) asks for a good formula for a waxing solution for double transfer carbon. A.—We have found the following, which is the original Autotype formula, quite satisfactory:

Yellow resin	6 drams
Pure beeswax	2 drams
Turpentine	1 pint

H. M. THEAKER (Heaton).—Your request is hardly one that can be answered off-hand, as all depends on the plates you are going to use, and the particular system you are going to adopt. You would do well to read carefully "Photography in Colours," by R. Child Bayley, price 1s. nett, or post free from our publishers 1s. 2d., also Marion's book with the same title, post free from Marion and Co., Soho Square, London, W., price 1s. 10d. If we can then help you by replying on any specific point we will gladly do so.

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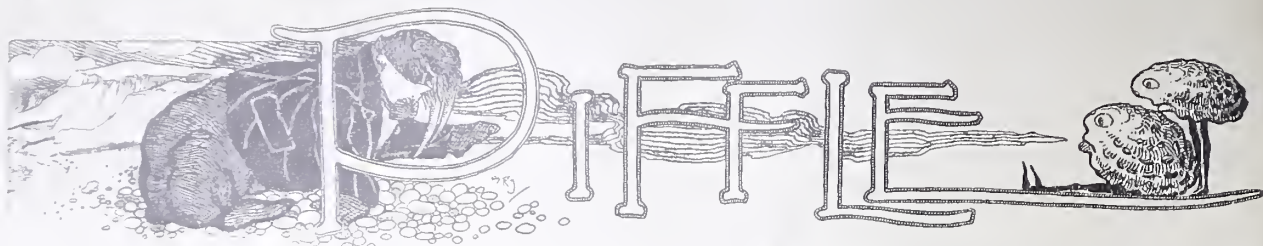
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"The time has come, the Walrus said, to talk of many things."

A GOOD many photographers who have aspired to have their work publicly exhibited have experienced the blissful sensation of having their work "chucked" by a selection committee. And serve them right. The public must be protected. The producers of these rejected masterpieces generally look upon their prints as epoch-making triumphs; but the selection committee takes a different view—a very different view indeed—and out they go. It has recently been suggested that some reasons for this rejection should be given. The geniuses whose prints are hurled forth with ignominy know that they *have* been shovelled out, but they want to know why. Let us in a spirit of humble enquiry consider this question for a few moments.

* * *

In the first place it is evidently taken for granted that those who select prints for an exhibition could, if they chose, explain their reasons for acceptance or rejection. This is an absurd assumption. It implies that the judges are rational and intelligent beings, which is going a bit too far. What a selection committee really does is to look at all the prints submitted to it, and carefully set aside all those that show any evidence of beauty, originality, imagination, or skill. These are promptly rejected, and enough prints for the show chosen at random from the remainder. If you don't believe this, ask anybody who has had his work rejected, and he will tell you that such is certainly the case. Why, how else could his prints have been sent back? They were beyond the comprehension of the degenerates who examined them.

* * *

Another mistaken idea is that a selection committee is constituted for the purpose of supplying criticism to any incompetent that likes to place a print before it. Nothing of the sort. The judges have to see that nothing really good escapes them and so reaches the exhibition walls. They act as a sort of sieve, stopping anything big for fear it should dazzle the eyes of beholders. They should not be asked for their reasons. They haven't any. Of course they have to see that nothing is shown that would make their own exhibits look small, and this naturally sets a standard. Of sorts. But you surely don't expect them to admit this as one of their reasons. They are not quite so silly as all that.

* * *

Yet it has been coolly suggested that on the back of each rejected picture (why not on the print itself?) should be clearly set forth the reasons for its exclusion. Why, if some of the judges' remarks were written on the prints they would set fire to them. I know someone who had to write criticisms of the prints exhibited at a certain show; so he took a shorthand writer round with him, and that shorthand writer had his notebook alight three times before they had done a dozen pictures. Of course the critic did not mean all his remarks to be recorded, but the stenographer had got them down and his book in flames before he knew what was the matter. Some people have no idea what judges and selecting committee men say about the pictures submitted to them. It is as well they haven't.

* * *

It has been asserted that these remarks on a picture would be helpful to the producer of it. They wouldn't. A man would find written on the back in varied but universally horrible caligraphy—"This print is too strong. A.B.—Far too weak to be effective. C.D.—Horrible! E.F.G.—I like it. I.J.—I don't. K.L.M.," and so on. Where does the helpfulness come in? Could he make a better print after acquiring the information conveyed in these sapient remarks? Moreover we should find the rejected bandying words afterwards with the judges about their reasons (?) for rejection, and some regrettable incidents would be inevitable. It would be very awkward if the owner of a rejected masterpiece not

only called one of his critics a chuckle-headed cabbage, but successfully demonstrated the truth of his statement. It would be an easy task to accomplish.

* * *

I must admit that I have always entertained the firm belief that these human sieves always reject the brightest and best of the work submitted to them. This opinion has been mainly based on the fact that whenever I have ventured to submit any of my own distinguished and illustrious works of art they have been invariably kicked out with prompt brutality and without the compliment of a second glance. But this belief has been considerably shaken recently. When some of the past-masters of the photographic art exhibited some of their evicted efforts as glaring examples of the kind of thing the thick-headed judges rejected in their ignorance I was instantly compelled to reconsider my opinions. I realised at once that mad as they undoubtedly are, the selection committee had some method in their madness. They might even with safety have ventured to give their reason for rejection, and they could have facilitated this operation by the simple expedient of having a rubber stamp made with the single word "Rotten," and hiring a small boy to stamp each one with a heavy hand. The reason for rejection might have been neither helpful nor palatable, but it would have possessed the merit of indisputable truth.

* * *

I begin shrewdly to suspect that these much-maligned selectors and judges are not the hopeless idiots that we, in our wounded vanity, profess to consider them. It is quite possible that, after all, they are good judges of poultry, and that our highly-prized swans are really geese, and very bony and unrepresentable geese at that. We sneer at them for not accepting at our own absurd valuation our gritty oil prints and our blobby gums, but very likely they are right in their stern rejection of them. As to being called upon for reasons, if I were a judge I would distribute my reasons to all enquirers with a shot-gun or a number nine pole-axe. Fancy a batsman whose middle stump is whirling in mid-air enquiring of the umpire what are his reasons for quietly observing, "Out!"

* * *

If we have a poor opinion of a selection committee we can refrain from submitting our prints to them. It is kinder to them and to everybody else concerned. But if we do obtrude our shabby productions on them and they righteously kick them downstairs we might have the decency not to squawk about it. And if we do insist upon reasons for this action it would serve us jolly well right if we were told them. And, mark you, after this vigorous defence of rejection committees I have some hope that one of these days I shall be rewarded by having one of my own prints actually accepted. Then perhaps someone will want to know the reason.

THE WALRUS.

SUBSCRIPTIONS.

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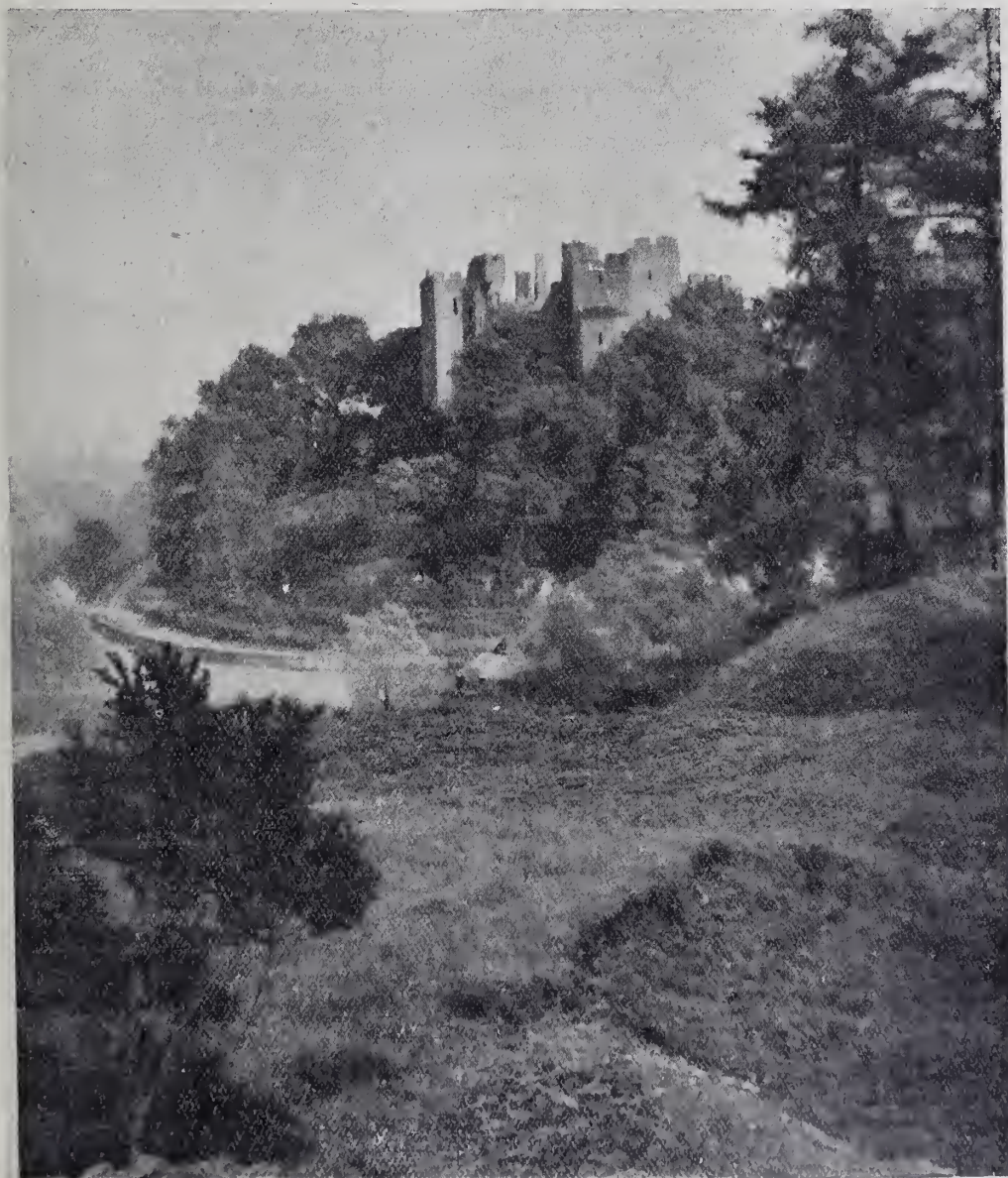
PHOTOGRAPHY

A JOURNAL FOR EVERY CAMERA USER.

EDITED BY R. CHILD BAYLEY.

PUBLISHED WEEKLY.

NOVEMBER 24TH, 1908. TUESDAY. No. 1,046. Vol. XXVI.



LUDLOW CASTLE.

BY F. C. PRITCHARD

EDITORIAL

Her Majesty's Photographs.

The event of the week has been the publication of the book of photographs by Her Majesty the Queen. Although the work as a product of a crowned head is unique, Queen Alexandra is by no means the first sovereign to use a camera. Photography as a hobby has appealed to the occupants of thrones as well as of "diggings." Fifty years ago or more it was a fashionable amusement, and a studio and dark room were fitted up at Windsor Castle for the use of Queen Victoria and Prince Albert. The present Czar also has been a keen photographer in the past, though we have heard little about it lately. But it has been left to Her Majesty to realise that in her stock of negatives there not only lay much that was of great interest to herself, but that many would be glad to have reproductions of them, and that the desire might be made of considerable service to charity. No doubt many of our readers will note with real, if not demonstrated satisfaction, that Her Majesty is not exempt from the troubles which beset amateur photographers of less exalted rank. The possession of the best of apparatus and material, as we have so often pointed out, is not a guarantee of success, and more than one of the very interesting pictures in the book will call up a fellow feeling in the minds of those who have confronted similar difficulties in their own work. Interesting as the volume is to every Briton, it is doubly so to those who share the Royal taste for the camera.

Too Low a Standpoint.

We are reminded by an article in the *Morning Leader* that a good deal of the unnatural effect which is to be seen in published snap shots is due to the fact that the hand camera is generally held not at the eye level, but at the waist level. The result is that it usually portrays scenes as they would appear if our eyes were about where the bottom button of the waistcoat comes—a view of the world which it is vouchsafed to few to perceive. The "photo-jumelle" and other cameras of the opera-glass type are free from this drawback, as they are generally held in front of the eyes, and this is the position most often adopted for such cameras as the Verascope and the Blocknote. The difference is by no means a slight

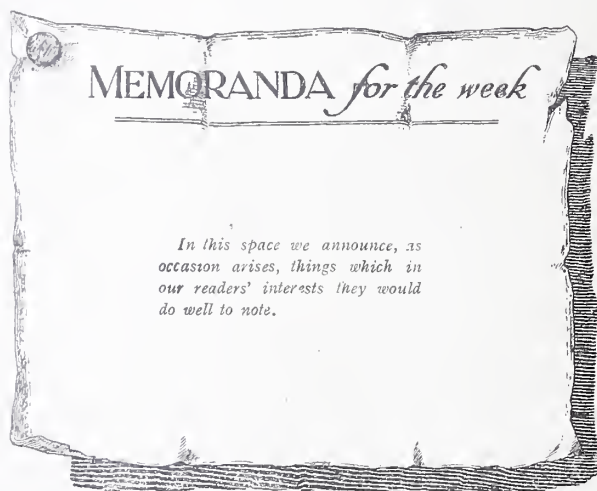
one, especially for the subjects generally attempted with the hand camera, as these have most of their importance in the immediate foreground, and it is on objects near the camera that a change in the height at which it is held has most influence, as can easily be seen by trial. The direct vision finder, such as is fitted to the Goerz-Anschutz camera, is very useful on this score, as it necessitates holding the camera at the proper height.

Bromide and Gaslight Prints of Poor Quality.

How is it that so many photographers fail entirely to make the best of what the bromide or gaslight printing process will do? A first-rate print on either of these papers is second to none in beauty or in the way in which it will register all the gradations of the negative. Yet the vast majority of prints are either pale, flat, washed-out looking things, or else are a greenish grey colour, which suits no single subject under the sun. Something is due, no doubt, to the use of unsuitable negatives—to the attempt to get a good bromide print from a negative that is too weak

to give a good print by any process. But after allowing for all this there is still a wide margin for other causes. We believe a good deal is due to the mistaken notion that the development must be watched as closely as that of a negative, and the print taken out of the developer the moment it seems to be sufficiently developed. The result is that even if the negative is a perfect one it never gets a chance. The amateur never learns whether the exposure he has been giving is right or wrong.

It will be as well if we repeat that a bromide print or enlargement to look right has got to be developed until there is a distinct pause in the darkening of the tones. The development seems almost to stop. Actually it has not stopped, and if the print is left in the developer very much longer it will be overdeveloped. But there is no need to hurry it out; it may be left until one is quite sure that the apparent cessation of the action has taken place. If this does not give a good print, the exposure must be altered accordingly until it does. The reader may depend upon it that unless the stage referred to is reached his



prints are going to look weak and pale. We say nothing against deliberate and intentional weakening of the print to get a particular effect, but pen this note for those who would get brilliant prints if they could, but find a difficulty in doing so. It is not that the maker's formula is wrong—the conclusion to which so many jump—but simply that the development of a bromide print is being confused with the development of a negative. That and the repeated use of the same lot of developer are responsible for many spoiled prints. We are sometimes told that a developer can be used over and over again. It can, and with no ill-effects. But as soon as there is any departure from a good rich black it should be discarded and a fresh lot taken. The worst of it is that when the printing is being done at night it is often not at all easy to know whether the colour is all right or not. It may seem satisfactory, and yet in daylight be quite rusty and disagreeable. It is much better to use a very little developer once or twice only (wetting the paper beforehand if necessary to get the print well and quickly covered) than to have a great bulk of solution and use it for print after print.

The Hobby Club.

An attempt is being made to found a club under this title to bring together ladies and gentlemen having some particular hobby who would like to meet with others possessing kindred sympathies, for the social exchange of experience and advice. Pending the acquisition and furnishing of permanent club premises, temporary accommodation is being provided, by special arrangement, for gentlemen members at Prince's Hotel, Jermyn Street, while lady associates are made temporary members of the Ladies' Park Club. The annual subscription is five guineas for gentlemen members and three guineas for lady associates. Photography is amongst the hobbies for which the club will cater; and as the Camera Club has now been extinct for several years, and the attempt to start a new one proved a

fiasco, the Hobby Club might perhaps provide that social centre of which so many London amateurs feel the want. A cartoonist the other day gave us a humorous version of the club, composed of members each with a single hobby of his own, and each without the slightest interest in that of anyone else; but it is easy to see that the club might very well do for a number of hobbies what no one was sufficiently well supported to do for itself. The secretary of the new club (Mr. Stuart Nuthall, of 38, Wilton Place, W.) will be pleased to provide full particulars.

Now, Johnson's so good natured, he will help one all he can;

I don't think I have ever met a more obliging man;
He told me any time I wished to photograph a bit,
He'd place at my disposal all his photographic kit.

The other day I thought I'd put his offer to the test;
With ready generosity he granted my request.
Then suddenly he said: "I think old Jenkins has my 'slides';

He's making some himself, and so he's using mine as guides.

"I lent my lens to Tomkins, as his own was rather 'slow';

The shutter's down at Smith's—at least it was a month ago;

I don't know where my 'body' is, for this I'll have to seek;

But Perkins walked off with my 'legs' one day the other week!

"I think Jones has my dark room lamp, and Higgs my draining rack;

While Dawson took my dishes and forgot to bring them back;

But, if you'll wait a week or so, I'll tell you what I'll do;

I'll look up all my outfit—meanwhile, here's my tripod screw."

Important Announcement to our Readers.

A GREAT many amateur photographers are in the habit of putting photographic operations aside during the winter months, only resuming them when outdoor amusements again become general. As many others know, this means that they miss some of the most entertaining forms of photographic work, since a great deal can be done without leaving the house, or even the fireside, in the winter evenings.

We have accordingly arranged to give, during December, special attention to indoor winter photography, each of our issues during that month dealing with some particular branch of the work. As there will be much in these that is specially directed to those who are comparatively-speaking beginners in photography, we have arranged for the issues to commence with the manipulation of gaslight papers in various ways, as this is especially a beginner's process. But we hope that in the series there will also be a good deal that will appeal to more advanced workers.

The dates of the various issues, and the subjects with which they will deal, are as follows:

Dec. 1.—Gaslight Papers.

Dec. 15.—Lantern Slide Making.

Dec. 29.—Negative Making on

Dec. 8.—Bromide Papers.

Dec. 22.—Enlarging Methods.

Winter Evenings.

The publishers ask us to point out that they will be pleased to send a specimen copy of one of these issues to any photographer with whose address they are furnished by a reader; so that those who would like to draw the attention of their friends to the series need only send a postcard to Messrs. Iliffe & Sons Ltd., at 20, Tudor Street, London, E.C.



Photographing Printed Matter.

A USEFUL DODGE.

By W. E. Hickling. Special to "Photography and Focus."

Our contributor in sending us the article printed below enclosed with it a page of "Photography and Focus" which had been split in half without a single tear or blemish, so that the printing on each side was backed up by plain white paper. Precisely how this can be done, and done quite easily, will be found to be explained below.—Ed.



IT often happens that some article or illustration in a newspaper or magazine is so interesting that a desire is felt to have a copy of it. But when the amateur decides to make a photographic copy of it difficulties begin to appear.

One of the chief of these difficulties in making a perfect copy is that the printed matter on the other side of the paper shows through to the front, especially if the paper is very thin or transparent.

There have been many ways suggested to obviate this trouble, and various degrees of success have resulted. One way, and the way the writer has found to be most successful, is simply to remove the back half of the paper altogether, thus separating the two printed surfaces by dividing the paper through the centre of its substance—in other words, splitting it. One then has two sheets of paper, each one half the thickness of the original sheet, and each printed on one side only. This may be thought a difficult thing to do, but the fact is that the process is simplicity itself.

Two pieces of smooth, strong calico are procured, each a little larger than the paper to be operated upon, and also some good, strong glue. The paper to be split has one side coated with the hot glue, care being taken to

ensure that it is evenly covered, particularly that no portion of the surface is left uncovered. Then immediately, before the glue sets, one piece of the calico is laid on the glued surface of the paper and pressed down into close contact with the paper in every part. The glued paper and calico are then turned over, and the other side of the paper is coated in the same manner with the glue. The other sheet

of calico is then applied to it in exactly the same manner. The whole (the sheet of paper and two sheets of calico) is now left to set and dry flat under slight pressure. When it is thoroughly dry the two pieces of calico are pulled apart evenly, and, if the operation has been carefully performed, one half of the paper will remain attached to each of the pieces of calico. It now only remains to soak off the papers from the calico in tepid water and to dry them. The surface of the paper is improved by being ironed with a warm iron (not hot enough to scorch the paper).

With a fine paper it is possible to obtain a negative by contact printing from the split paper, and thus to save copying in the camera, if a copy the same size as the original is required.

This method of "paper splitting" comes in very useful when an article printed on both sides of the sheet is to be pasted into a scrap-book.



Busy Bee.

By Miss I. E. How.



A CRITICAL CAUSERIE.

By "The Bandit"

Concerning some Photographs by Beginners.

"Critics?—appalled I venture on the name.
Those cut-throat bandits in the path of fame."—BURNS.

A FRENCH author once wrote something to the effect that solitude is a good thing, but there has to be someone in the solitude to realise its goodness. Perhaps I haven't got the aphorism quite right—it is many years since I read it, and I have forgotten the names of both book and author—but you will see its drift. Now in landscape photography solitude is a good thing, but often difficult to emphasise without the aid of a figure. The curious lonesomeness of a scene is sometimes its salient feature, as we look at it on the ground glass screen of the camera; but the presence of a human being in the landscape makes it look far more lonesome than if no human being were there. And again, in some rural view—a village or what not—its lack of population is, maybe, better shown by introducing a figure than by showing the street or road empty of life.

I take it, at any rate, that this is why so many amateurs are fond of putting figures into their landscapes. The figure helps to lay stress on Nature by sounding a note of humanity. In the

picture "Young Anglers," for example, the boys actually draw attention to the pond in the depths of the wood rather

than to themselves. This is not a photograph of certain boys, but of a delightful nook where boys spend their Satur-



Young Anglers in Epping Forest.

By T. H. Houlding.



On Tour

By Ernest Smith.

day afternoons. Subtract the boys from this picture, and really there's not much left. I'm not sure that I wholly admire the arrangement and attitudes of the boys; but I am bound to say that their presence seems justified.

Roadway scenes naturally clamour for a figure. What is a road for, if not for the use of man? But how often would the photographed road be the better had its wooden and self-conscious and often totally unsuitable figure been omitted? Compare "Far from the Madding Crowd" with "On Tour." In the former we have a view of a quaint and evidently off-the-track hamlet. Partly because the cottages on the left required balance and partly to break the emptiness of the road, the photographer has induced a friend to stand, or perhaps I should say to pretend to walk, in front of the said cottages. Result, a ruined picture. The figure is banal and citified—an obvious alien. It may be claimed that precisely because he is well-dressed and un-rural he lays emphasis on the title; but surely his presence rather illustrates the arrival of a member of the madding crowd in a

place where he has no call to be, than the normal absence of the madding crowd.

Nevertheless, it isn't simply because this figure is too towny that the effect is spoilt. The old "art textbook" theory was that if you pose a man in a silk hat and frock coat in the midst of a sylvan solitude, no artistic result could possibly ensue. The rule is a rough and ready maxim, but is on the whole a sound one.

But I could imagine that given a proper pose and a good model, the "story" told by the frock coat and top hat in the woods might be strong and poignant—far more poignant than the story told by a photograph of a common woodman in the woods.

I am sorry that amongst my batch of prints I have not found one which illustrates my point: but as a stop-gap I may fall back on that called "On Tour," which I have already asked you to compare with "Far from the Madding Crowd." In "On Tour" (reproduced on the previous page) the figure is to all intents and purposes as well-dressed and banal as that in "Far from the Madding Crowd," yet the former figure is quite "in the picture," while the latter is cruelly out of it.

The highway in "On Tour" is fine and lonely; it has a quality of mystery in its distance; and even the near trees are rendered with a beautiful softness of texture. The curves of road and fence and hedge are quiet and restful. You would have said that here, if anywhere, a figure might have been dispensed with and the landscape left to tell its tale quite unaided.

But the undoubted fact remains that the figure, commonplace though it is, makes the picture. It is perhaps too centrally placed, and it is not in what one would consider ideal walking tour garb; yet its sheer efficiency outweighs these little faults. This young fellow is really tramping along the road, he is not standing to be photographed as is the figure in our companion picture.

Too often the landscape with a figure is neither landscape nor portrait, but a broken-backed cross between the two, not satisfactory as either. Why should "Wood Scene" have a figure in it? Or, looked at the other way, why should this portrait of a nice young lady have so much woodland surroundings?



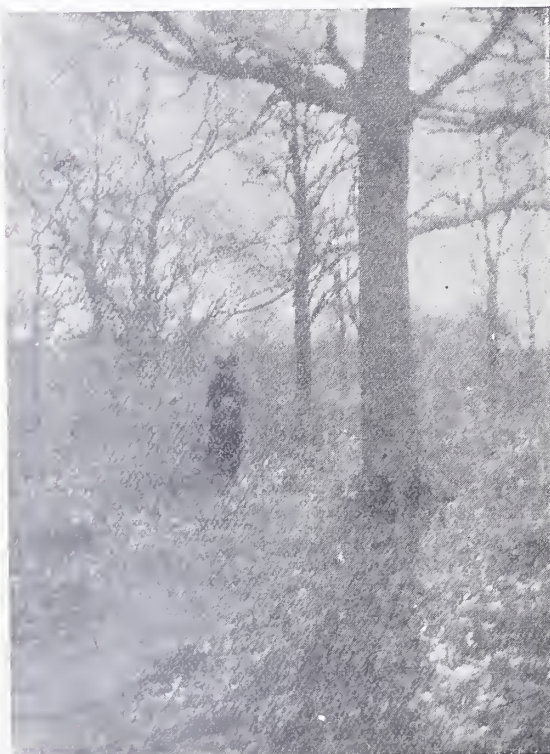
Far from the Madding Crowd.

By Percy Milan.



Wood Scene.

H. W. Elliott.



Sylvan Solitude.

By A. D. Hellner.

There are two distinct subjects here—Girl and Wood. Combined, they spoil each other; the wood swamps the girl, and the girl provides a too-interesting competitive theme in the midst of the wood. I admit frankly that even without the girl this particular piece of wood might not have made much of a composition. It is too featureless. But introducing the girl hasn't mended matters; it has only created a fresh bit of confusing and distracting detail, where there was already too much.

Yet how useless it is to lay down hard and fast rules in these matters! No sooner have I criticised "Wood Scene" thus, than I run across a print which is called "Sylvan Solitude" (its title is the worst thing about it). Now, superficially, this print contradicts half my sermon.

"Sylvan Solitude's" figure is about the same proportionate size as "Wood Scene's," and its landscape is of the same genus; yet in "Sylvan Solitude" I like the introduction of the figure, though in "Wood Scene" I intensely dislike it. "Sylvan Solitude's" figure is dim and mysterious; it looks just the sort of silent, sad figure which would enjoy a sylvan solitude, and especially on a misty winter's day. Whereas "Wood Scene's" figure is sharp and perky and artificial and altogether out of key with nature.

So it becomes more and more evident that to enunciate laws about the introduction of figures into landscapes is only to expose one's narrow-minded prejudice in such matters.

The truth is, the man whose work is ordinarily artistic doesn't make mistakes about his figures; his tasteful instinct prevents him from making mistakes. Whereas the man who is innately in-artistic will go on coming howlers over his figures—even though he uses ones which seem the same as those used by the successful artist. To my mind, "Far from the Madding Crowd" and "Wood Scene" are flagrantly wrong, while "Young Anglers," "On Tour," and "Sylvan Solitude" are right—notwithstanding that the "class" of figure and the type of landscape are practically the same in each.

And I will ask you to observe that the successes and failures are the photographer's, not the model's.

REVIEWS

The Wellington Christmas Greeting Postcards.

THOSE who are users of the famous Wellington papers, who wish to send photographic postcards with their greetings to their friends this Christmas, should note that there is no need to go beyond their favourite make of paper for the purpose. Whether it is Wellington Bromide, or P.O.P., Wellington Self-toning, or the ever-popular S.C.P., each can be obtained in postcard substance, and with Christmas designs on the back, needing nothing

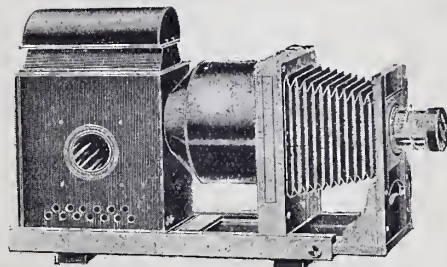
beyond printing in the ordinary way. The designs are very suitable, and we feel sure that it is too late in the day for there to be the slightest need for us to expatiate on the quality of Wellington papers. For many years they have stood at the very summit of excellence in their respective classes, and enjoy a favour amongst photographers, both professional and amateur, that can be described without exaggeration as world-wide.

The Empress Enlarging Lantern of Houghton's, Ltd.

A VARIETY of patterns of enlarging apparatus both for artificial light and for daylight are made by Messrs. Houghton's, Ltd., at their Ensign Works, and are fully described and illustrated in a special price list which they have issued—a list which will be sent to any of our readers who drop them a postcard (to 88 and 89, High Holborn, London, W.C.) asking for it. The series ranges from the simplest and cheapest designs up to the most sumptuous and elaborate patterns, provided with every movement which the most exacting amateur photographer can require.

A cheap but most efficient member of the series is that known as the "Empress" enlarger, which is illustrated on this page. We have lately had an opportunity of examining this piece of apparatus, which is constructed for use with incandescent gas, limelight, acetylene, etc., as may be most convenient to the user. The lantern body, which is of iron, is connected by an iron cone with the frame carrying the condenser, which latter is a plano-convex one of 5½ in. in diameter. (This particular enlarger is only listed in quarter-plate size.) The lens is of portrait pattern, and is provided with an iris diaphragm and orange glass cap, the fine focusing in the cheaper form being effected by means of a helical mount; the more expensive form has a lens with a rack and pinion movement and Waterhouse stops. Rough focusing is done by sliding the front in or out in the usual way.

The "Empress" enlarger is simple in design, but has all the necessary movements required for making first-class enlargements, and it is strongly made so as to be capable of hard usage. For the amateur who wishes to make enlargements during the winter evenings, but who is not prepared to go to the expense of one of the more elaborate



patterns, it should prove just what he wants. At £2 12s. 6d. (the price of the simpler form), or £2 17s. 6d. with the better quality lens, it is decidedly cheap. A sliding metal tray and support for the illuminant costs 1s. extra, while for 6s. 9d. an incandescent gas burner and reflector are supplied.

The Leto Christmas Card Outfit.

UNLESS we are very much mistaken, the Leto Christmas Card Outfit, which is being put upon the market by the Leto Photo-Materials Co., Ltd., of 3, Rangoon Street, London, E.C., will find a very wide sale amongst amateur photographers who propose this year to print their own Christmas cards. It provides within a single packet everything that is necessary for the purpose, except hypo and water.

The packets, which are made in two sizes, selling respectively at 1s. and at 2s., contain the materials for half a dozen cards.

Eight pieces of "Seltona" paper are allowed for the prints, with six white plate-marked cards on which these prints are mounted, and six very attractive cover mounts, with a tissue paper leaf inside, into which the mounted print is slipped. The smaller size takes prints 3½ in. by 2½ in., and the larger 4½ in. by 3½ in. The simplicity of "Seltona," and the effective character of prints made on it, are too well known to our readers to need further mention here; we need only call attention to the outfits as providing a capital means of making Christmas cards on "Seltona" from one's own negatives.

Lockyer's Tints for Lantern Slides.

A GREAT many of our readers, to judge from the enquiries on the subject which we are constantly receiving, are interested in methods of colouring lantern slides, and many is the time that we are asked to state where suitable materials for the purpose can be obtained. Realising the demand, Mr. J. E. Lockyer, of 244, Evelyn Street, Deptford, London, S.E., has put on the market a neat box, which sells at 1s., and contains six bottles of concentrated dye solutions, with a brush, for slide colouring.

The six tints provided are violet, green, blue, dark brown, red, and yellow, and are similar to the "Photo Tints" which Mr. Lockyer has long supplied for prints, except that these are specially intense, to suit them for transparencies where a greater depth of colour is a necessity. They are not pigments, but true dyes. That is to say, they are not laid on the top of the picture, but are absorbed by the gelatine itself, and no medium is necessary when using them. The colour

is applied to the surface of the slide with the brush provided, giving it a sort of circular motion so as to spread the liquid all over the part that is to be coloured. No extra depth of colouring is given to any particular part, the image of the photograph itself providing this. When one colour has been applied the slide is allowed to dry before the next is put on, but if the work is being done in a warm room this will be found not to take very long, or time may be saved by colouring several at once.

The work is one which should provide amusement for many. The colours are very strong, so that a little goes a long way, and we should not like to guess how many slides could be tinted with the contents of this shilling box—a very great number. The effects obtained will depend, of course, upon the skill and taste of the user; the merely manual dexterity required to apply the colours evenly is nicked off directly. We ask our readers who are interested in the colouring of slides to make a note of this introduction.

How Photography Need not be a Costly Hobby.

BY C. P. STURGESS. Special to "Photography and Focus."



THERE is an impression in many quarters that photography is an expensive hobby, and that unless the amateur is prepared to put his hand down deep into his pocket he will not be able to do work which he will care to show to his friends. The impression is fostered by the sumptuous price lists which many of the big firms issue, which are crammed full of particulars of appliances and materials, of the most alluring kind it is true, but all costing money, and many costing a good deal of it. I do not say that these are not nice things to have; no doubt they are. But they are photographic luxuries, not necessities. In this article I propose to show with what a simple outfit, and at what slight expense, photography can be practised, and I would have the reader understand that by photography I mean real good work, such as might be successful in exhibitions and competitions—work which shall have nothing to show that it was not produced quite regardless of expense.

The camera and lens I shall say little about. There are cameras to suit all pockets, and there are lenses, too. Provided the camera is quite light-tight and the lens may be stopped down, the fact that the outfit only cost twenty shillings, instead of twenty pounds, is not very material. I assume that the amateur has got a camera and lens, and wants to run it cheaply.

The first question which arises is, "What about a dark room?" A dark room devoted exclusively to photographic work is a luxury. At night all rooms are dark until we light up, and in the domestic scullery and at the domestic sink negatives can be developed quite as well as anywhere else. The bath room is sometimes pressed into service, but the scullery is certainly better. The photographer feels freer, and knows that a little mess will do no harm, and that he runs no risk of spoiling the appearance of his bath or damaging the wash basin. If some room without a water supply has to be used, a piece of oilcloth may be put down on the table, and a can of water and a bucket on the floor hard by.

The lighting of the room need not be a costly affair, although ruby lamps may be obtained up to a sovereign or more. If the house is fitted with electric light, a mere bag of two thicknesses of ruby fabric can be tied over the bulb, and will be found to give plenty of light. A couple of cane or wire rings should be attached inside the bag to keep it off the lamp itself, or it may get so hot as to scorch. In houses



The Lake: a December Morn.

By Charles Waring, sen.

where there is no electric light a dark room lamp of some kind must be obtained, but it need not cost more than half a crown. For this one can buy a lamp to burn oil, with an outside winder, and two glasses (ruby and orange) about half-plate size. A sheet of tissue paper between the glasses makes a very pleasant light.

Dishes, of course, are wanted. Two should be bought the same size as the plates to be used, and two four times as large for fixing and washing negatives. These may be of xylonite, and if quarter-plate is being worked the four dishes—two $4\frac{1}{4}$ in. by $3\frac{1}{4}$ and two $8\frac{1}{2}$ by $6\frac{1}{2}$ —will cost less than three shillings. Four printing frames are not an extravagant number, and, if there is any printing to be done, economise time very considerably. Two shillings will provide these in quarter-plate size, and, with the exception of a graduated measure (four-ounce size, conical form, price about eight-pence), complete the list of requirements.

For materials in addition to plates and papers for printing we shall want a few chemicals. These need not be very numerous. The cheapest developer is pyro soda, and a good formula can be selected and made up without any need for scales and weights, using the quantities as bought. One ounce of pyro and a quarter of an ounce of potassium metabisulphite are dissolved in half a pint of water (dissolving the metabisulphite first), and form the A solution. Half a pound of sodium carbonate and half a pound of sodium sulphite dissolved in a quart of water form the B solution. For use we take forty minims of A, half an ounce of B, and dilute the mixture to make two ounces. This gives a developer which contains two grains of pyro and twenty-four grains of carbonate and of sulphite to each

ounce—an excellent all-round developer for plates, and a cheap one. Hypo is best kept in solution—a pound to two quarts. Toning baths are best made according to makers' instructions.

The great thing where economy is important is to avoid ready made solutions and solutions which will not keep.

Surely enough has now been written to show that, apart from the first cost of the camera and lens, something much less than 10s. will provide the necessary appliances and chemicals for the work, and for work of the best. By exercising due care photography can be made not an expensive but one of the cheapest hobbies.



We shall be glad to know the name of the reader who sent us the effective picture reproduced above, and his title for it; that we may give him due acknowledgment. Our reference to it has been mislaid.—Ed.



Two Experiences and what they taught me.

BY T. PICKERING. Special to "Photography and Focus."



IT is only reasonable to suppose that photographic plates and papers, which are so extraordinarily sensitive to light, should be very easily affected by other things also; and we know this to be the case. The amateur who would have nice clean negatives and prints, free from spots and marks of all kinds, has got to be on the watch against some of the subtlest emanations that are known to

science; anything, therefore, that can be done to warn him in time should be useful. It is with such a view that the following experiences are put forward.

A good many years ago now I went for my first photographic holiday. Some of the negatives were developed while I was away, but most were brought back for development. They were all packed alike after exposure, the card separators which the plate maker had used to keep the films apart originally being saved and used again. But two dozen of the exposed plates were wrapped in ordinary newspaper before being put into the box; the rest were wrapped up in the paper in which they were originally packed. The latter developed up quite clean and good; the former in every case were fogged for from a quarter to half an inch from the edge. It should be noted that this was not a case of newspaper being in contact with the film; I had been cautioned against that, as being certain to set off the printing on to the plate. Only the edges of the plates came in contact with the newspaper, but there was some emanation from it, which was sufficient in the five or six weeks which elapsed between exposure and development to fog the plates for nearly half an inch all round.

The lesson in this case is always to save the papers in which plates or sensitive papers are wrapped by the manufacturers. I believe one of the great and constant difficulties of the makers is to obtain a regular supply of wrapping material which shall be absolutely without effect on their goods. The amateur will do well therefore to keep a box handy in which this most useful material may be saved, clean and in good condition, until it is required for use.

Later on, I had another lesson. Some P.O.P. prints, when they came out of the printing frame, were slipped between the leaves of a book to protect them from light until the time came to tone them. Toning had to be deferred for three days, and the prints were left for that period shut up in the book. When taken out, the printing



BY ALFRED J. LOUGHTON.

Awarded a Certificate in our Advanced Workers' Competition.



had set off distinctly upon them, and even after toning and fixing it could still be read by holding the print up in front of a looking-glass.

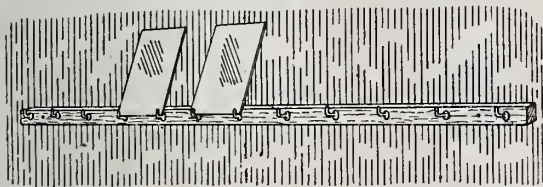
This was certainly a lesson as to the sensitiveness of P.O.P., and since I received it I have never allowed an untuned print to come into contact with printed paper. Of course, it is not well to defer the toning of P.O.P. more than to the end of the day on which it is printed. Deterioration soon sets in, but if it has to be deferred the prints should be put face to face, and replaced in the packet in which the paper was supplied.

It seemed to me at the time that this setting off might be utilised in some way, to make copies of book illustrations without the use of light. It should be possible to shut up a sheet of sensitive paper in a book for a certain time, and so

to get a copy of whatever was in contact with the face of it. Perhaps some ingenious reader of *Photography and Focus* can work out such a method, which for certain purposes ought to be very useful indeed.

A Rack for Drying Negatives. By W. J. Horner.

AN easy way to make a rack for drying negatives is shown in the illustration. It consists simply of a wood rod with a series of dresser hooks screwed into it, and is nailed to the wall in any convenient place. The lower edges of the negatives rest in the hooks and the upper edges lean against the wall, the film sides being outwards. Drying in this way is quicker and more



uniform than when a number are put in the ordinary rack, face to face, with only a small space between each.

The arrangement, of course, is much the same as the simpler method of standing negatives on window ledges or other places where there is something for them to lean against, but the

advantage of the rack illustrated is that it can be fixed at a convenient height, either in the dark room or elsewhere, and the negatives may remain there for any length of time without risk of slipping or getting knocked down, the rack being situated too high up for such casualties. The wood may be either square or round in section, or may be square with its front corners planed off. In either case a measurement of about $\frac{3}{4}$ in. each way is large enough. A line should be ruled or gauged along it on which to mark the centres of the holes for the hooks. For quarter-plates these should not be more than $2\frac{1}{2}$ in. apart, so that there shall be no risk of a plate slipping down between two hooks. Small holes are bored a little way in with a bradawl, care being taken to make them all at right angles to the surface. Then the hooks are screwed in, and any that are inclined above or below the normal when viewed from one end of the rod are bent slightly until all are in line. Holes are then bored through the rod for nailing to the wall. The number of nails used for this purpose depends on the nature of the wall and the amount of hold the nails get in it. Generally one nail near each end is sufficient. The length of the rod may be anything that happens to be obtainable, say, about 2 ft. 6 in., or 3 ft.

The New Mawson Plate. "The Gladiator."

ONE of the oldest firms in the dry plate trade is that of Messrs. Mawson and Swan, whose Castle, Lantern, and other brands have acquired and maintained a reputation for the highest quality. The latest product of the Newcastle firm is a very fast plate—"extra special rapid," as it is described on the box—which they have christened the Gladiator. We have recently had an opportunity of using some of the Gladiator plates, and it is the result of these trials which we now have to report.

The box bore the following inscription: "The speed readings of Mawson's Gladiator plate, taken in the H. and D. Photometer, exceed that of any other plate which we know, and the character and quality of this plate specially recommend it for studio work, either daylight or artificial light." We were therefore prepared to find the new plates exceptionally fast, although the makers did not give any definite

speed number for them, either H. and D. or otherwise. Our own trials were exclusively camera tests, mostly on indoor portrait subjects, as the plates are put forward as specially suitable for studio use. Failing any more definite guide, we treated the plates as if they had a speed of 350 Watkins, and found that on this basis we got a correctly exposed result with ease. The makers recommend a pyro-soda developer, containing to each ounce of developer as applied to the plate three grains of pyro, twenty-four grains of sodium carbonate crystals, and thirty-two grains of sodium sulphite crystals, the pyro being preserved with one-fourth its weight of metabisulphite. With this developer we found the plates, in spite of their extreme rapidity, worked very cleanly, and gave ample density and excellent gradation throughout. They seem to be admirably fitted for portrait work where not only is a good plate wanted, but one of the very highest speed.

QUESTIONS



& REPLIES

REGULATIONS.—(1) Envelopes must be elsewhere must be enclosed. (2) The full name given. Only one question on one subject is allowed in each letter. (4) Prints may be sent for criticism, but a separate coupon must be sent with each print and a stamped addressed envelope (not loose stamps) for their return. Queries are dealt with in strict rotation in the order received. Only "Urgent Apparatus" queries will be dealt with by post, for which purpose a stamped envelope must be enclosed.

AGEA (Allanbank).—Certainly it would.

SIMBLE (Ilford).—There is no book on the subject at all.

J. A. M. (Carnhill).—We should put them thus: 5.1:4:3.2.

W. BOWERS (Toronto).—All the slides have been returned.

A. H. H. (Preston).—As far as we are aware, there is no such method.

DEWITT (West Hampstead).—It is good value and very reliable.

T. COOPER (Loddon).—We can trace no letter from you. Please repeat it.

AMATEUR (Scarborough).—Send us a piece of the cake, and we will say no more about it.

W. KING (Georgetown, Madras).—There are many others which we shall greatly prefer.

F. W. GARDNER (Harrow).—Glad to hear that *Photography and Focus* is of so much service.

G. OCCLESTON (East Ham).—As you have got the back numbers, we need only refer you to our issue for June 16th, page 121.

T. BROWN (Highams Park).—Your letter has been handed to our advertisement department that the complaint may be looked into.

P. S. S. (Walthamstow).—One will give as "good results" as the other; but the more costly is certainly to be preferred if you can afford it.

ENQUIRER (Dublin).—Yes; but in all such concerns the greatest circumspection is necessary, especially when second-hand goods are being dealt with.

J. KNAPMAN (Chingford).—We are sorry we cannot oblige; but we cannot let photographs unsuccessful in our competitions go out of our possession.

A. B. (Battersea).—None whatever; we wish you luck. It was not our idea, but is a very old one, though like many more old things, it had been lost sight of.

P. TALAGRAND (Soho).—Please repeat your enquiry as to background, giving full particulars. We do not keep queries, and had not got your first when your second arrived.

SALCOMBE (Kilburn).—The R.R. would be preferable to the triplet as working at a larger aperture, and being more saleable. You do not say on what point you want advice.

F. HILL (Acocks Green).—Thanks for the prints, which we were glad to see. They are very curious. The one seems a fairly good print, but the subject is not a very interesting one.

H. J. FREYS (Newcastle-on-Tyne).—This is only to be settled by trial. The effects are altogether false and unpleasant, and we have had no experience whatever in their production.

R. V. N. R. FITZGERALD (Savernake).—The only plan would be to advertise your name in *Photography and Focus*. Such an advertisement appeared once recently and was then stopped, so we suppose that the advertiser got what he wanted. We know of none.

W. E. W. (Ivybridge).—(1.) The Tella is the lightest reflex camera we know, when what it will do can be taken into consideration. The simplest, no doubt, is the Premograph. (2.) We never heard of it. What do you know of it, and what is it for?

M. A. G. (Sheffield).—It might be due to overexposure, to an unsuitable negative, to insufficient development, or to too much light in the room. An improperly made up developer might cause it, but it is far more likely to be due to one of the first named.

CAMERA (Chelmsford).—The sheaths are first cleaned by being dipped in nitric acid, washed, and then boiled until black enough in

Hypo	...	...	...	...	...	6 drams
Copper sulphate	...	...	...	...	...	4 drams
Water	...	...	...	...	...	20 ounces

This black is said to be very durable, and to require no varnish to protect it.

F. T. HARDING (Clapton).—To find the focal length of the combined lens and "magnifier" multiply the focus of one by the focus of the other, and divide the result by the two-foci added together less the separation between their optical centres. The result is the focus of the combination. For most purposes it can be easily ascertained by measuring from the plate to the subject when copying same size. The focus is one-fourth the distance these two are apart.

marked "Query," and the "Enquiry Coupon" found and address in addition to a *nom-de-plume* must be

L. J. CARTWRIGHT (Southampton).—We have nothing to add to what we wrote on page 524 of *Photography and Focus* for November 3rd.

J. H. RENNISON (Newcastle-on-Tyne).—The dark spots are certainly not caused by the bubble, as you can see for yourself, if you cut a little piece of black paper, the size of it, and stick it on the lens so as to cover it. What has caused them we do not know.

CONSTANT READER (Ilford).—We do not understand your query. Please be as explicit as possible, and if we can help we will. If necessary send us prints before and after trimming (with stamped envelope for their return). At present we are quite in the dark.

S. Y. (Leith).—No enquiries can be answered unless the name and address of the sender are given, and no criticism is provided unless the photograph is accompanied by a coupon and a stamped envelope. We know nothing of any photograph of a "potato."

F. W. GRANT (Herne Hill).—There is no harm in writing a reply to our criticism, but unless the prints are sent back with it, the reply is not very intelligible. We have no recollection of your work; it is hardly likely we should have, seeing the number dealt with.

GEORGE (Carrington).—Your conditions are very unfavourable. One of Staley's Planastigmats should suit you, but you must not expect to be able to do what you want with a larger stop than about f/11. A six-inch focus would be quite as long as would be practicable.

R. H. (New Malden).—The best plan is to adopt the procedure given on pages 77 and 87 of "Toning Bromide Prints," by Blake-Smith, price 1s. nett, or post free from our publishers 1s. 2d. A description of the method would take too much space to be given in this column.

GIBEL-HABIB (Gibraltar).—Two ground glasses will probably be necessary, and they should be an inch apart, and separated by at least an inch from the negative. The light can be as near them as you like, provided it gives even illumination, and there is no risk of breakage.

ANXIOUS TO LEARN (Hatcham).—The better result is got by making the positive on glass; and the best result of all by making both this and the duplicate negative by the carbon process, using transparency tissue and coating with collodion in the way given in any handbook on the process.

BETA (Hove).—It may be diluted with an equal bulk, not of water but of a five per cent. solution of sodium sulphite. It will be found that this increases the time required for development about two and a half times. No developer for plates is used more than once by those who wish to get the best results.

A. T. HOUGH (Bermondsey).—It is very doubtful if what you want can be done; we can only suggest that you communicate with Messrs. Wratten and Wainwright, Ltd., of Croydon, who specialise in such matters. It is not an enquiry to which we could give you a satisfactory reply, or indeed one at all, off-hand.

P. and F. (Dalston).—Any colour will do, but neutral grey, light and dark, is to be preferred, since it photographs to the same tone that it presents to the eye. Mr. Seymour says he likes to use backgrounds of a colour to harmonise with that of the flowers themselves, and this would have the advantage, generally, that the photographic contrasts are similar to those in the actual subject.

HOWARD RICHARDS (Fulham).—Our advice would be to let him start with "The Complete Photographer" (10s. 6d., post free 10s. 10d.), and to supplement that, if he wants a more advanced and theoretical handbook, with "Science and Practice of Photography" (5s., post free 5s. 4d.), and this in turn with "Instruction in Photography" (7s. 6d., post free 7s. 10d.). Our publishers can supply them all.

W. J. J. (New Southgate) asks "under what circumstances is it advisable to use backed plates"? A.—The reply is under all circumstances. Most of the leading workers use backed plates for every purpose, not merely for those where halation is expected. They are perhaps less used for portraiture than for any other purpose. For interiors they are essential for the best work. For landscape they are highly desirable. Halation makes itself most troublesome (A) when the exposure has been full and the development correct, and (B) when the exposure has not been sufficient and the plate much over-developed with the idea of bringing out all there is on it.

SPHYG (Congleton).—Dawbarn and Ward published a book on press photography, but it is out of print. We know of no other.

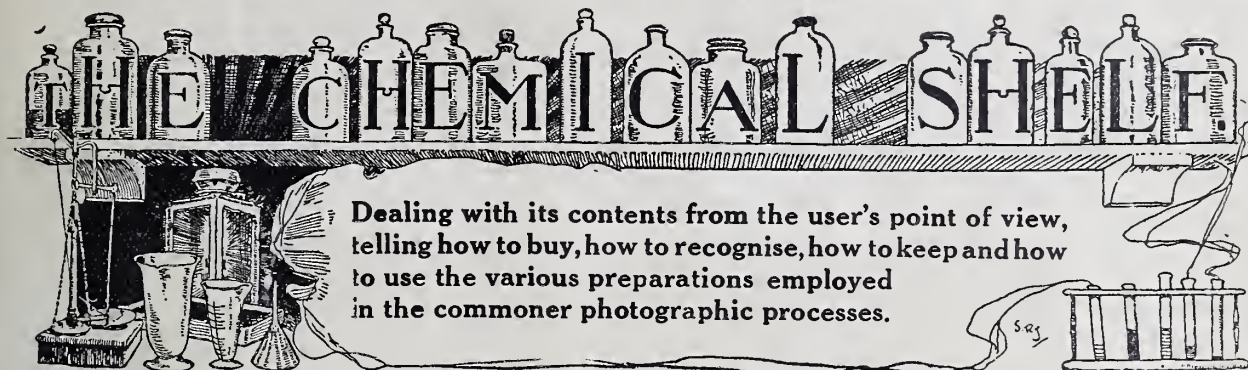
LEDER (Bow).—(1.) By the dry mounting method. (2.) By printing not by direct gas or lamplight, but by light reflected from a sheet of white card in front of the printing frame, using one of the recognised vignetting methods.

W. SUMMER (Lancaster), T. H. MOGG (Plymouth), J. H. POLLOCK (Glasgow).—We cannot trace individual entries, but all the slides sent in, which were accompanied by stamps, have been returned. We have none here now at all.

J. ANDERSON (Aberdeen).—We should expect them to be. See page 516, etc., of *Photography and Focus* for October 27th, 1908.

F. FIRTH (Clapham).—Perhaps some of the salt is crystallising out. The formula is correct. We should advise you to pour off and use the clear liquid at the top, pouring it back after use. If it bleaches the negatives it will be quite safe to use it.

BURROWS MOORE (Brockley).—They would be "eligible," but we do not see that they would stand any chance of taking an award; since from the very nature of a copy, the opportunity of putting personal artistic skill into the work does not arise.



POTASSIUM BROMIDE.

Potassium bromide, bromide of potassium, or bromide of potash, is a white salt, which is sold either as a coarsely crystalline powder or in crystals, mostly cubical in shape. It keeps quite indefinitely either in the dry state or in solution, although fungoid growths occasionally manifest themselves in the latter. It is extremely soluble in water, hot or cold. Potassium bromide pure enough for all photographic purposes can be obtained from any druggist or photographic dealer.

The chief use of potassium bromide as far as the amateur photographer is concerned is as a preventive of fog in development. A trace of the bromide added to the developer is very useful in bromide or gaslight printing, as it tends to keep the picture bright and clean. In the development of negatives it has the same effect, but it also affects both the speed of the plate and its capacity for truthful rendering of the tones of the original. In the earlier days of plate making, when the production of rapid plates free from fog was very little understood, bromide was almost a necessary ingredient of the developer. With the excellent plates that are now on the market it is no longer a necessity, and should not be used. If foggy negatives are obtained, the cause of the fog should be sought out and removed. There is no first-class plate on the market which will not work with perfect freedom from fog without the addition of any bromide to the developer.

Recently another use for bromide has arisen in the sulphur toning process. A solution containing potassium ferricyanide and potassium bromide being used to bleach the prints which are afterwards darkened in a solution of sodium sulphide.

FORMULÆ.

Ten per Cent. Solution for General Use.

Potassium bromide	...	...	...	1 ounce
Water to	...	...	...	10 ounces

Bleacher for Sulphide Toning.

Potassium ferricyanide	...	...	...	6 grains
Potassium bromide	...	...	...	8 grains
Water	...	...	...	1 ounce

POTASSIUM CARBONATE.

Potassium carbonate, also known as carbonate of potash, is a white coarsely crystalline powder, which readily absorbs moisture from the air, forming a wet pasty mass. It must therefore be kept in a well-corked bottle; but even then it shows a tendency to cake and to get wet. In a stoppered bottle it soon makes the stopper irremovable. It keeps well in solution, for which also a corked bottle should be used. Anhydrous potassium carbonate can also be purchased. This is a fine white powder, four grains of which are equal to five grains of the ordinary crystalline powder, and may be substituted for it. When "potassium carbonate" is given in formulae the crystalline powder is meant. As there are many qualities of potassium carbonate on the market, it is

necessary to get the salt as supplied for photographic purposes from a reliable dealer.

Potassium carbonate only has one use as far as the amateur photographer is concerned, and that is as an alkali in development. For this purpose it presents no advantages over sodium carbonate, which has now very largely supplanted it.

A ten per cent. solution of the crystalline salt is a convenient strength in which to keep potassium carbonate, and this may be used as an accelerator in any alkaline developer in place of sodium carbonate.

POTASSIUM HYDRATE.

Potassium hydrate, also known as potassium hydroxide or caustic potash, is generally met with in the form of white opaque sticks, about the thickness of a pencil. A less pure quality takes the form of broken white or greyish cakes; this should not be used for photographic purposes. The sticks have a greasy, soapy feel, and attack the skin, so that they should not be handled more than is necessary, and the fingers should be washed directly. They powerfully attract moisture from the air, and if not kept in a well corked bottle soon pass into a sticky mess which is quite useless. In a stoppered bottle they soon render the stopper a fixture, and in solution potassium hydrate not only fastens the stopper but corrodes the glass. A well corked bottle is the best way of keeping both solution and solid, but although beyond attracting moisture caustic potash keeps unaltered, it is better only to buy it as required, if at all.

The chief use of potassium hydrate in photography is as the alkaline component in developers. In most cases it is too energetic, and the milder action of potassium or sodium carbonate is to be preferred. Hydrokinone, para-amidophenol and pyro-catechin formulæ are occasionally given in which caustic potash figures, but in most cases it is better to substitute caustic soda, which is equally effective, and is more likely to be pure. Better still is it to avoid caustic alkalies in the developer entirely, since they exercise a powerful action on the gelatine, softening it and making it extremely liable to frilling and blistering. For these reasons one formula typical of a developer with potassium hydrate will suffice:

FORMULÆ.

Hydrokinone-Caustic Potash Developer.

A.				
Hydrokinone	...	...	...	80 grains
Sodium sulphite	...	...	...	1 ounce
Citric acid	...	...	...	30 grains
Potassium bromide	...	...	...	15 grains
Water to	...	...	...	20 ounces

B.				
Potassium hydrate	...	...	...	75 grains
Water to	...	...	...	20 ounces

Equal parts of A and B are taken to form the developer.



A Mountant that does not Cockle.



A MOUNTANT for photographs which has the great advantage that it does not affect the glazed surface of the print in any way may be made from the rubber solution which is now to be purchased everywhere, for the repair of bicycle and motor tyres. The solution takes two forms, in one carbon bisulphide appears to be the solvent used, and this is not so suitable for photographic purposes as the solution in benzol, which is that most commonly met with. The thicker the solution the better, so long as it can be applied to the print at all; and if it is purchased in a tin with a large lid and not in a collapsible tube, the lid may be left off for a short time to allow some of the solvent to evaporate. The stick which sticks best is that which has an almost black colour.

To apply the mountant, a thin flexible knife like a palette knife is much more convenient than a brush. A liberal supply of the rubber solution should be taken out of the tin, and the print being laid face downwards on a clean piece of paper, the mountant is well spread over the back of it, as evenly as possible, with the knife. The print is then picked up, adjusted in its place on the mount, and rubbed into contact. It is a good plan, at this stage, to put it away under pressure for a day or two. The writer uses a letter-copying press for the purpose, putting a pile of prints in it, with a few sheets of newspaper between each. If any of the mountant exudes at the edges it does no harm, as it can be removed when dry by rubbing with the tip of the finger, when the rubber comes off easily enough in little rolls.

Not only does this mountant not affect the glazing of the print, but it is also quite free from any tendency to cockle

the mounts. Prints may even be stuck on to thin paper with it, and it is therefore very suitable for mounting photographs in albums or books. A little discolouration sometimes appears on the face of the print when it is first mounted with this preparation, but if it is left exposed to the air for a short time this, which is due to the solvent being absorbed by the paper, soon vanishes. For mounting prints in books, where they will usually be kept under pressure, it is not

From a Distant Reader.



The Path by the Trees.

By A. Chenik (Simonstown, S. Africa).

necessary to do more than apply a little of the rubber solution to their four corners, keeping it a little away from the edges to avoid risk of any squeezing out.

It is sometimes stated that a drawback of this method of mounting is that in course of time the rubber perishes and the print comes away from its mount, but this must be due to the use of some unsuitable solution, or to some peculiarity in the mounts. The writer has prints which were mounted six years ago in this manner, which are still as firmly adherent to their cards as ever, and he has a book twenty years old illustrated by Woodburytypes which were mounted with rubber, and show no signs of loosening. A well-known firm of photographic manufacturers also informed him several years ago that all their showcards had prints mounted on them with rubber solution, which was found to be perfectly satisfactory.

H. WAGGETT.

An Improved Tripod Screw.

WE have received from Messrs. J. A. Sinclair and Co., Ltd., of 54, Haymarket, London, S.W., a tripod screw, shown in the illustration herewith, which is certainly much more handy to use than the pattern which is most frequently seen on cameras. It consists of two parts—the screw itself and a fly-nut running on it. The nut is removed from the screw, and this is then screwed into the camera as far as it will go. The camera can then be put at once on to the tripod, the screw being put straight through the hole in the tripod head. The fly-nut is then screwed on



underneath until it clamps the camera firmly down. It will be seen that this arrangement entirely does away with the fumbling about to find the socket on the camera with the end of the tripod screw—an operation which not only wastes time, but inevitably leads to the scratching of the nicely polished baseboard of the camera. When the camera is to be turned round on the tripod, the fly-nut is loosened with half a turn, and clamped up again when the right position has been found.

The screw which is of $\frac{1}{16}$ in. Whitworth thread—the standard size for the great majority of British and American cameras—is fitted with a stop so that it will not go too far into the camera. It retails at 1s.

HOW I MAKE MY CAMERA PAY

By L.S. Brown
Special to Photography & Focus

ONE OF A SERIES OF
ARTICLES SHOWING HOW
EVERY AMATEUR MAY
RECOUP AT LEAST SOME
OF HIS OUTLAY.



NUMEROUS of amateur photographers possess photographs which they could sell to the press if they only knew how to do it. Only after I took up press photography did I perceive the saleable value of many negatives which I already had in stock. On the other hand, even after I took up press photography, I frequently submitted prints which failed to sell, though they were really saleable. I had submitted them in the wrong way or to the wrong journal.

I do not mean to insinuate that at the present moment every print I offer to an editor is immediately accepted by him. "Declined with thanks" (and sometimes without them!) is a formula one remains familiar with, I imagine, to the end of one's days. But at least I think I may say that when I submit a print and it is declined, its rejection is now not my fault—as it used often to be. Practice makes perfect; experience teaches. There is a lot to learn, not merely of the art of finding press subjects and knowing them when found, but of marketing them in the proper manner once you have obtained them.

The ABC of the job is to learn *where* to submit any given picture. To take a self-evident example: a picture of a church destroyed by fire may be interesting to the "Sphere," while not worth the paper it is printed on to the "Sporting and Dramatic." Or if the church is an unimportant one, but its vicar performed prodigies of valour in trying to save it, then one may surmise that the photograph, while beneath the notice of the "Sphere," will be deemed noteworthy by the editors of "Good Words" or the "Sunday Circle." Or, if there appears to be nothing remarkable about the church or its vicar, then neither of these weeklies will accept the photograph, but we still may sell a print to the local paper, whose readers will be interested in a purely local disaster.

On the face of it, this is simple commonsense; yet I fear many amateurs do not apply it as they should. In a vague way, however, many do apply it, yet fail for another and equally important reason—they have too hazy a knowledge of the contents of the press. They know of the existence of these papers, and they think they know the type of illustration published in them, but they never actually open their pages to make sure. Now, as I think I have said before, there is only one way of discovering what sort of picture an editor wants, and that is by studying his paper and keeping *au fait* with the pictures he is actually using week by week and month by month. The "policy" of the paper does not seem to change much, but it does change, and what may have suited the editor a twelvemonth ago may not suit him at all now.

I will give you an instance. A few years ago nearly all the principal weeklies regularly published "articles"—that is, longish screeds dealing in detail with some central topic, and accompanied by a number of photographs all illustrating that topic. You might come across an article, for example, on a

travel subject, such as "A Trip to Morocco," illustrated with a dozen Morocco snaps; or an article on "Turbines," illustrated with pictures of turbine-making, the inventor of the turbine, and its design. These articles were constantly saleable, and therefore series of illustrations were saleable likewise. Nowadays they are extremely rare. Some of the papers still sometimes give a page of illustrations to a subject of this type, but nearly always unaccompanied by text beyond the two or three-line legends under the pictures. More often the subject only gets half a page, consisting of, maybe, two illustrations. More often still, series of pictures are conspicuous by their absence. Why? Because the policy of the weeklies is



Fishing.

changing—nay, has changed. They are growing more scrappy. Their reading matter is no longer articles, and their choice of pictures is to match. One who never looks at them will be quite ignorant of this very vital development, and will go on submitting series of pictures to papers like the "Tatler" and "Sketch," where they have but a slight chance of acceptance, when very probably if he sent them to some such

"gazzette" or "World's Work" a monthly they might immediately be bought. And it is the same with single pictures. There is a big demand for them every day, but it is a demand which waxes every day—slightly, but surely following the leading the public's taste.

There is another reason why you *must* keep an eye on the journals. If you do not, you will run the risk of submitting stale stuff. You will send a picture of some subject which was "done" by some other photographer and "appeared last week." Now, if you make this slip more than once or twice you will get sick of you and your work, and will pay you no attention in future. He will infer that you do not intend to follow his paper—and that is far from being a good impression to make on the man who edits it.

To propose to the aspiring press photographer that he should every week buy every illustrated paper on the book-stall would be absurd, but he must at least make an effort

to see them as frequently as possible, and if he lives near a free library he should be a diligent patron of its loaded desks. Living in London, he can take a stroll along the Strand and Fleet Street once every seven days and make a prolonged inspection of the windows of the "Sketch" and other papers, where sample pages are displayed. In the country it is more difficult to keep abreast of journalism without spending money; but if he can possibly afford sixpence a week he should take in one of the illustrated papers, changing it from time to time for another. A paper like the "Bystander" will perhaps best repay his sixpence, as it gives a very large selection of pictures and is catholic in its taste.

Speaking of the "Bystander" reminds me of a case of a photograph which would not "go" in one quarter, yet "went" at once in another. It is a picture of a girl fishing, and is reproduced on the preceding page. I sent it in to "Country Life"—a paper which takes innumerable sporting pictures, and to which I have sold many fishing pictures since then. It was rejected.

Why? The reason, as I now know, was twofold. First, the figure of the girl was too large—it was too "pretty-pretty" for a paper which treats sport very seriously; and secondly, it was not quite business-like enough. A white sweater, it might be argued by experienced anglers, would frighten the fish. The colour of one's clothes should match the banks of the river approximately — at any rate, should be darker in hue, and so forth. (Of sporting pictures like this I hope to say more some other day; they are a very sound line for the amateur.) But the "Bystander" at once accepted and published the picture; not, I conceive, because it is less keen on accuracy in its sporting views, but because the "girl element" in the picture was the sort of thing with which it habitually enlivens its pages. Let me add, *en passant*, that the model really does fish in this costume, and, though admittedly posed, was fishing both before and after the photograph was taken. But disregarding all that, the moral of the story is this: Here was a picture which was given a full page in one weekly and rejected utterly by another—apparently—not dissimilar weekly, appealing to the same class of readers. That is the sort of lesson one profits by when endeavouring to acquire the dove-and-serpent-like cunning necessary to sell amateur photographs to the press.



W. D. S.

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The Advertisement Manager, PHOTOGRAPHY AND
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SALE AND EXCHANGE (for Amateurs only).
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2d. will be charged for registration, and three
stamped and addressed envelopes must be sent
for forwarding replies. Only the number will
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DEPOSIT SYSTEM.—Persons who hesitate to
send money to unknown persons may deal in
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Deposit System. If the money be deposited with
PHOTOGRAPHY AND FOCUS, both parties are advised
of this receipt, and upon intimation of the arrival
and acceptance of the goods, the money is for-
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ADDRESS.—All communications for the Editor
should be addressed: The Editor, PHOTOGRAPHY
AND FOCUS, 20, Tudor Street, London, E.C.

TO CONTRIBUTORS.—The Editor will be glad
to consider original up-to-date manuscripts on
photographic subjects. All contributions must be
typewritten, or in very legible handwriting, on
one side of the paper only, and should bear the
name and address of the sender. Letters or com-
munications arising out of matters already appear-
ing in the paper are not paid for. The Editor
disclaims legal responsibility for the safety of
matter submitted to him, but he will endeavour
to return rejected manuscripts, etc., when a
stamped addressed envelope is enclosed for that
purpose. No notice whatever can be paid to
communications without the name and address of
the sender, nor necessarily for publication.

PRINTS FOR CRITICISM.—Readers sending
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it without fee. The Editor will be glad to con-
sider for publication, with or without letterpress,
photographs of special interest, on terms to be
arranged.

PAYMENTS.—Articles and illustrations are paid
for on acceptance.

INTERVIEWS.—The Editor will be at 20,
Tudor Street, on Wednesdays, between the hours
of 9.30 and 11.30 a.m., but can only be seen at
other times by appointment.



THE CAMERA CLUB OF NEW YORK has
issued a well illustrated little prospectus
of its new premises at 121, West 68th
Street, in that city. They seem to be
provided with every convenience.

THE FOREST GATE CAMERA CLUB is
now the title of what was the Forest
Gate M.M. Camera Club. Residents
in the neighbourhood who are inter-
ested can obtain particulars of the
society from the honorary secretary,
Mr. E. J. May, 183, Sebert Road,
Forest Gate, London, E.

LUMINOUS PAINT AND PHOTOGRAPHY.
Mr. J. E. H. Bullen, of Bell's Photo-
graphic Co., Ltd., Leigh Road, Chalk-
well Park, Westcliff-on-Sea, Essex,
writes us pointing out that "Warnerke
used a luminous tablet for his sensito-
meter, but in his price list dated May
1st, 1885, he advertised also luminous
tablets, cabinets 2s. 6d., whole-plate
3s., 12 by 10 4s. These tablets were
sold as a 'constant light' for all kinds
of photographic exposures."

Books for . . . Photographers.

Photography for All.

By W. JEROME HARRISON, F.C.S.
Covers the whole ground of photography
as practised in its most popular forms.
Cloth Bound 1/- nett. Post free 1/2.

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All the different processes described at
first hand by a practical slide maker.
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THE CHELMSFORD PHOTOGRAPHIC
SOCIETY holds its exhibition from
December 30th to January 2nd, entries
closing December 17th. Particulars
can be obtained from the honorary
secretary, Mr. W. J. Morison, of Saver-
nake Lodge, Chelmsford.

X X X X

BARNET SHOWBOARDS. Messrs.
Elliott and Sons, Ltd., of Barnet, have
sent us samples of a number of effec-
tive showcards they are sending out to
dealers for the autumn trade. These,
especially those bearing prints on the
Barnet papers, are decidedly decora-
tive and in good taste.

X X X X

THE AGFA FLASHLIGHT. Messrs.
Charles Zimmermann and Co., of 9 and
10, St. Mary at Hill, London, E.C.,
ask us to point out that the prices of
this flash powder, as given in the
advertisement on page xxi. of *Photo-
graphy and Focus*, are incorrect.
They are for "grammes" of the
powder, not for grains as printed.

X X X X

STOPPERS OR CORKS. Lecturing
before the Wilkesden Polytechnic
Photographic Society, Mr. G. C.
Weston said that unless good stoppered
bottles were used, with the stopper
fitting perfectly, corks were preferable.
The corks should be immersed in a tin
of melted paraffin wax, and when taken
out and cooled they would be thoroughly
air-tight. Another good plan was to
cover the cork with thin sheet rubber,
tying it at the top. This would be as
good as a rubber stopper. Old P.O.P.
would make splendid labels for bottles.
It should be immersed in warm water
and then applied gelatine side to the
bottle, and pressed into contact. When
dry it would be found to be fixed
tightly. To prevent measures being
knocked over and broken in the dark
room, the lecturer said they should be
painted underneath with white enamel.
They could then be easily distinguished
in the dark room.

X X X X

NIGHT PHOTOGRAPHY. Mr. A. H.
Blake, dating from the Blenheim Club,
King Street, St. James's, writes: "Sir,—
In various photographic societies, both
in town and country, I have met mem-
bers who, like myself, are keenly in-
terested in night photography. By
night photography I do not mean fakes
or results obtained by combinations of
daylight and night exposures, but re-
sults obtained solely after dark by
natural and ordinary artificial light.
This is, I am persuaded, a new field for
pictorial effect but little explored and
little used, and those who are trying
to find out more about its conditions,
and to extend its scope, would gain
much by co-operation with those en-
gaged in a similar quest. If those who
are interested in this matter will com-
municate in the first place with me, I
will take upon myself, until some sort
of organisation is formed, to call to-
gether those who have had some ex-
perience of this kind of work, and who
may wish to join either a portfolio club
or a society."



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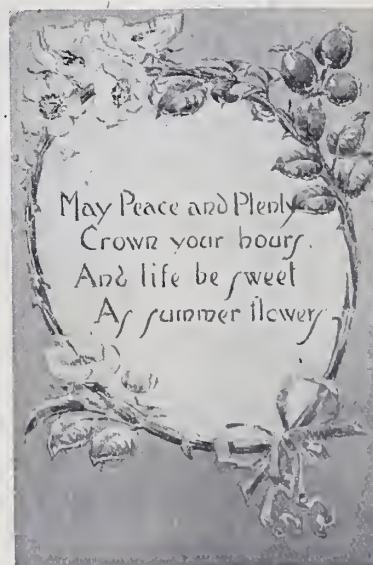
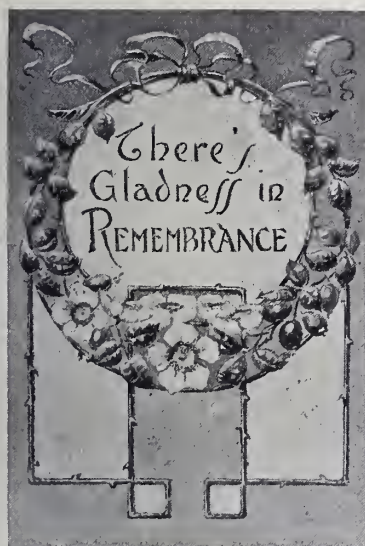
OF ALL DEALERS.

Cards for abroad should be ordered at once.

These Designs will shortly be printed from Line Blocks instead of Half Tone, as the former is more suitable.

The Birmingham Photographic
Co., Ltd.,

Criterion Works, **STECHFORD**, near Birmingham.



SOUTHEND-ON-SEA is to have an Arts and Crafts Exhibition, from January 5th to 9th, 1909, at which there will be a photographic section. Particulars and entry forms for the exhibition can be obtained by making application to the honorary secretary, Mr. A. J. Conna-beer, of 37, Dowsett Avenue, Southend-on-Sea.

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PAUL MARTIN'S NIGHT PHOTOGRAPHS. Mr. H. Armytage Sanders, of 71, Shaftesbury Avenue, London, W., writes us on this subject as follows: 'Hear, hear! to your remarks in this week's *Photography*. Mr. Paul Martin was a real pioneer in this particular class of work, and I was instrumental in getting him to publish slides from his beautiful negatives, adding a few subjects from time to time. It may interest you to know I still have very fine carbon slides (made by Dorrett and Martin) from these original negatives, and that I send them all over the world.'

DEMONSTRATING OIL PRINTING before the Bradford Grammar School P.S., Mr. C. E. Jackson stated that from his experience a thorough washing of the paper after printing was unnecessary. A sickly grey colour is due to under-exposure of the print, while a very slight under-exposure increases contrast. Clouds refuse to appear at all with a fair treatment of the print, but satisfactory cloud effects can be inserted at will. He had tried to paint in the clouds after the rest of the print was dry, but the result is far from satisfactory, as the sky then appeared too dark. The time spent in dabbing in a print ranged from twenty minutes to two hours.

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A **PRICE LIST OF BARGAINS** in cameras and lenses by the best-makers has just been issued by Mr Arthur Spencer, of 41, Harrow Road, London, W. The list contains a number of very cheap lines, and will be sent to any of our readers on application.

THE CAMERA IN THE VATICAN. It is stated that "in consequence of litigation," the Pope, who has regarded photography in a very liberal manner, has prohibited it in the Vatican for the future.

× × × ×

TONES ON ALPHA PLATES. Home portraiture was the subject dealt with by Mr. P. R. Salmon at the London and Provincial last week. He said that all his slides were made upon Ilford lantern plates, special and Alpha. One of the richest browns on Alpha plates was that obtained by slightly under-exposing, and so securing a greenish tone by development, afterwards bleaching with mercury and then flooding with weak ammonia. The slide was not blackened as might be supposed, but a rich brown tone was the result, which looked particularly rich upon the screen. Beautiful warm black tones were obtained on the "special" plates by bleaching with mercury and blackening with a solution of sodium sulphite.



The Week's Meetings.

MONDAY, NOVEMBER 23RD

Lancaster P.S. Annual Exhibition.
Bletchingley and Nuffield C.C. "Velox Paper." W. F. Slater.
Bournville and D.P.S. Demonstration. H. M. Cornthwaite.
Northampton N.H.S. and F.C. Lectures.
Preston C.C. "Ecdyosids." A. Kinder.
Cripplegate P.S. "Plates and Development." C. W. Coe.
Kidderminster and D.P.S. "Hints and Tips." A. Gordon Smith.
Bradford P.S. "Nature Poets and Nature Pictures." Percy Lund.
Bowes Park and D.P.S. Beginners Class. Technical Demonstration.
Wallasey A.P.S. "Trimming and Mounting Prints." Rev. A. E. Parry.
Scarborough and D.P.S. "Elementary Enlarging." B. A. Kenny.
Oxford C.C. "Carbon Printing." Dr. Lynam.
Southampton C.C. "On the Fringe of the Austrian Alps." C. B. Howdill.
Stafford P.S. "Enlarging." A. L. Ypp.
Worcestershire C.C. *Photography and Focus* 1908 Prize Slides.

TUESDAY, NOVEMBER 24TH

Wallington C.C. Annual Meeting.
Birmingham P.S. "Canals, Carillons, and Coifs." C. B. Howdill.
Kinning Park Co-op. Soc. C.C. Burroughs, Wellcome & Co.
St. Helens C.C. "New Zealand." E. Glover.
Chelmsford P.S. "Velox Paper." W. F. Slater.
Forest Gate C.C. "Reduction and Intensification." E. Vasey.
Slough P.S. "Print Trimming and Mounting Competition." E. Vasey.
Blackpool & Fylde P.S. Wellington & Ward Specialities. H. Wade.
Nelson P.S. Thornton-Pickard Prize Slides. R. Hesketh.
Bottle P.S. "Round Liverpool & District with a Camera." R. Eastham.
Glasgow Southern P.A. "The Painter of the Angelus." Rev. T. Cook.
Leeds P.S. "The Dead Cities of the Zuyder Zee." Thomas E. Green.
Oley & D.C. & A.S. Whist Drive.
Monklands P.S. "Flower and Fruit Photography." R. Burnie.
Keighley & D.P.A. "Lantern Slide Making." F. Bunclett.
Nelson C.C. "Carbon Process." F. Hartley.
Hackney P.S. "Lantern Slides of President's Outing."
Hatley P.S. "Dordrecht and District." E. Markes.

WEDNESDAY, NOVEMBER 25TH.

Torrugh Poly. P.S. "As far in the Fatherland." W. L. F. Wastell.
Farnworth C.C. "How to Use a Reducing Lantern." J. Marsell.
Acton P.S. "Enlarging." Scott Cowan.
East Kent Scientific S. "Velox Paper." W. F. Slater.
Hampstead P.S. Carbon Printing. R. W. Wylie.
Rochdale A.P.S. Thornton-Pickard Prize Slides. R. Hesketh.
Wimbledon Park P.S. "Lantern Slides and how to Make Them." E. Prior.
Cherley P.S. "Country Life in France and Holland." T. H. Greenall.
Sale P.S. St. Helens Society Folio.
Leeds C.C. "Preparing the Exhibition Print." T. Lee Syms.
North Middlesex P.S. "The Humble Beauties of the Flower World." E. Symour.
Bristol P.C. "Oil Pigment Process." E. G. Watts.
South Suburban P.S. "Notes on Home Portraiture." P. R. Salmon.
Birmingham F.S. "Oil Printing." F. W. Ferrie.
Croydon C.C. "The Photography of Coloured Objects." C. E. K. Mees.

Societies will have their meetings announced here if the syllabus is sent to us at the beginning of the Session, or from time to time.

THURSDAY, NOVEMBER 26TH.

Hull P.S. "Genre and Figure Studies." T. Lee Syms.
Photo Art Club, Atherdeen. Informal Meeting.
Ilford P.S. "Ozobrome." F. C. Boys.
Leigh P.S. "Photography in Natural Colour." J. Critchley.
Melbourne C.C. "Velox Paper." W. F. Slater.
Brigflouse P.S. "Burnt in Photographic Miniatures." Philip Eliff.
Liverpool A.P.A. "Rambles and Scrambles on Pacific Slope." H. E. Young.
Chelsea D.P.S. "Lantern Slides by Reduction." A. S. Long.
Batley & D.P.S. Thornton-Pickard Prize Slides. R. Hesketh.
Armley & Wortley P.S. "Figure and Genre Studies." A. Cohen.
L. & P.P.A. "The Christian Monuments of Rome." S. J. Peckett.
North-West London P.S. "A Dive into Belgium." W. L. F. Wastell.
Woolwich P.S. "Yesterday and To-day." Burroughs, Wellcome & Co.
Rugby P.S. Prize Slides.
Dublin C.C. "Nansen's Polar Expedition." W. G. Mitchell.
Waterford Y.M.S.C.E. *Photography and Focus* Prize Slides.
Handsworth P.S. "Flashlight Photography." R. H. Phillips.
Maidstone & Inst. C.C. "Flower Photography." E. Seymour.
Richmond C.C. "Tyndale with reference to old Roman Wall." H. Dale.
Belton A.P.S. "Wellington & Ward's Specialities." H. Wade.
Watford C.C. Monthly Competition.

FRIDAY, NOVEMBER 27TH.

Oliver Goldsmith P.S. Enlarging.
Romsey P.S. "Enlarging." W. F. Slater.
Colne C.C. "Natural History Photography." G. A. Pooth.
Birkenhead P.A. "A Talk on Composition." J. A. Trench.
Ashton-under-Lyne P.S. Thornton-Pickard Prize Slides. R. Hesketh.
Watford. "Ozobrome." T. Marly.
Lincoln A.P.A. Competition.

SATURDAY, NOVEMBER 28TH.

Walthamstow P.S. National Gallery.
Huddersfield Naturalist & P.S. "Neglected Fields." C. Mosley.
Farnburgh P.S. "A Trip to Iceland." James Puncle.
Mili C.C. Prize Slides.

MONDAY, NOVEMBER 30TH.

Leek P.S. "Velox Paper." W. F. Slater.
Scarborough & D.P.S. C. P. Goerz Co.'s Prize Slides.
Canterbury C.C. "Yesterday and To-day." Burroughs-Wellcome.
Southampton C.C. "Carbon Process." A. E. Herley.
Bradford Grammar School P.S. "Flattering Portraits." H. E. Wroct.
Bowes Park & D.P.S. "Oil." H. Stuart.
Bournville & D.P.S. Criticism Evening.
Bradford P.S. Five Minute Papers by Members.
Cleveland C.C. Lantern Slide Making and Exhibition of Members' Slides.
Preston C.C. "Orthochromatics." B. Wade.
Kidderminster & D.P.S. "The Photographic Lens." C. P. Goerz.
Bedford C.C. "Exposure and Development." J. S. Smith.

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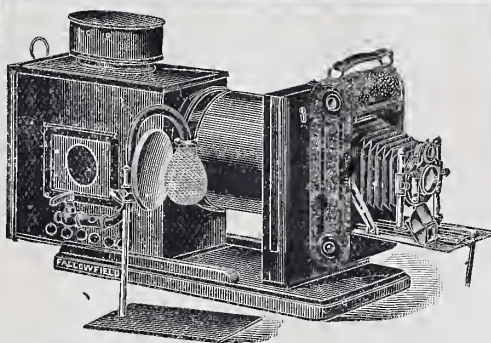
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6d. each.
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"FALLOROLL" ENLARGER.

Complete with inverted gas burner, adaptable to any type of similar camera.

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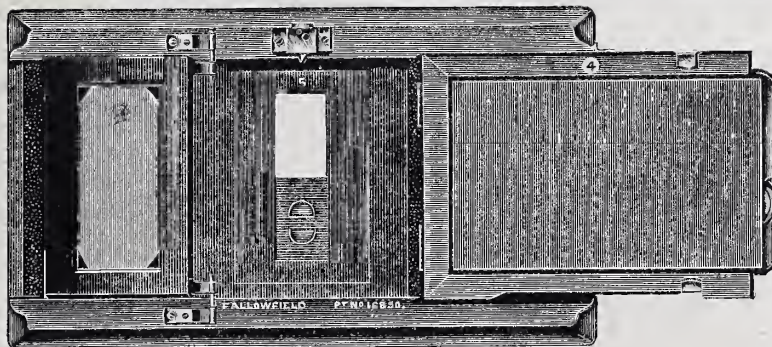
6d. each.
5/6 dozen.
60/- gross.

"Autochrome Photography."

A Simple Treatise on Direct Colour Photography.

Post free - - 3d.

Post free - - 3d.



No. 2 MULTISECTO. Booklet sent post free.

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JONATHAN FALLOWFIELD,

CENTRAL PHOTOGRAPHIC STORES,

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Electric Dark Room Lamps.

Goerz Binoculars,
from £5 15s.

"Taquita" Automatic Camera.



Zeiss Prismatic Binoculars.

"Sanderson" Cameras.

Goerz-Anschutz Cameras.



BEGINNERS' COMPETITION.

Open to all photographers who have never taken an award.

PRIZES.

First Prize.—A signed copy of "The Complete Photographer," a half-guinea work by Mr. Child Bayley, now in its second edition.

Second Prize.—A free subscription to *Photography and Focus* for twelve months.

One or more certificates of honourable mention will also be awarded.

RULES.

(1) Each competitor can send as many prints as he likes, but each print must bear on the back the coupon, published each week, the name and address of the sender, the title of the picture, and no other writing whatsoever.

(2) No print will be eligible that is larger than 5½ in. x 3½ in. (postcard size) or 5 in. x 4 in.

(3) No print must be mounted.

(4) No handwork other than simple spotting is permitted on negative or print, nor shading or dodging of any kind. It is distinctly understood that entry in the competition implies a declaration by the competitor that this rule has been complied with; and in case of dispute, the editor shall have the right to call for the negative from which the entry purports to be a simple direct contact print.

(5) No prints will be returned, and no correspondence with regard to the competition can be undertaken.

(6) The publishers of *Photography and Focus* shall have the right to reproduce, without payment, any of the prints sent in, winning or otherwise. But except the winning prints, the names of competitors of other prints that may be reproduced will not be published without the competitor's consent.

(7) All entries must be addressed "Beginners' Competition," the Editor of *Photography and Focus*, 20, Tudor Street, London, E.C., and must be delivered at that address by the first post on the closing date at the very latest.

CLOSING DATE.—Monday, Nov. 30th.



"Photography" Medal. Actual size.



"Photography" Plaque. Actual size. Weight in silver over three ounces.

ADVANCED WORKERS' PRINT COMPETITION.

PRIZES.

First.—"Photography" Silver Plaque.
Second.—"Photography" Bronze Plaque.
Third.—"Photography" Bronze Medal.
One or more certificates of honourable mention will also be awarded.

RULES.

(1) All photographs must be sent addressed "Advanced Competition," the Editor of *Photography and Focus*, 20, Tudor Street, London, E.C., postage paid, to reach there not later than the first post on the closing date, and must contain a stamped addressed envelope or label (not loose stamps) if they are to be returned.

(2) Each photograph must be mounted, but not framed. Prints in slip-in mounts are not eligible. Each must bear on the back the name and address of the sender and the title of the picture. No letters or other communications must be enclosed with the prints. Every print must bear attached to its mount a coupon for the competition of the month, which will be found in each issue of the paper.

(3) Each photograph must be the work of the competitor as regards selection and arrangement of the subject, exposure and development of the negative, and printing, development or toning, and mounting of the print.

(4) The prints which are accompanied by stamped envelopes or labels will be criticised by post, and the editor shall have the right to reproduce any of the prints, winning or otherwise. The awards will be made a fortnight after the closing date.

(5) Awards may be increased or withheld at the absolute discretion of the judge, and in all cases of dispute the decision of the editor will be final.

(6) There is no restriction as to the eligibility, except as set forth in these rules, and except that the same negative must not be used more than once in the competition. That is to say, that a print from it once submitted, all further prints, however varied, are ineligible.

(7) Neither editor nor publishers of *Photography and Focus* shall be held in any way responsible for the safety of prints or for their return to the competitors.

(8) The sending of a print to the competition will be regarded as a declaration to the effect that it is eligible under these rules, and that the competitor agrees thereto.

CLOSING DATE.—Monday, Nov. 30th.

SPECIAL SUBJECT COMPETITIONS. OPEN TO ALL READERS.

PRIZES.

First Prize.—"Photography" Plaque in Silver.
Second Prize.—"Photography" Plaque in Bronze.
Third Prize.—"Photography" Medal in Bronze.
One or more certificates will also be awarded.

RULES.

(1) The subject of each photograph entered must be that announced for the particular competition.

(2) Each competitor can send as many prints as he likes, but each print must bear on the back the name and address of the sender, the title of the picture, and no other writing whatsoever. Each print must have attached to it a coupon for the competition of the month, which will be found in each issue of the paper.

(3) No print must be mounted. No handwork other than simple spotting is permitted on negative or print, nor shading or dodging of any kind. It is distinctly understood that entry in the competition implies a declaration by the competitor that this rule has been complied with; and in case of dispute, the editor shall have

the right to call for the original negative from which the entry purports to be a simple direct contact print.

(4) No prints will be returned, and no correspondence with regard to the competition can be undertaken.

(5) The publishers of *Photography and Focus* shall have the right to reproduce, without payment, any of the prints sent in, winning or otherwise. But except the winning prints, the names of the senders of other prints that may be reproduced will not be published without the sender's consent.

(6) All entries must be addressed "Special Subject Competition," the Editor of *Photography and Focus*, 20, Tudor Street, London, E.C., and must be delivered at that address by the first post on the closing date at the very latest.

SUBJECTS AND CLOSING DATES.

A Domestic Interior. Closes Monday, November 30th.

A subject suitable for use as a Christmas or New Year Card. Closes Thursday, December 31st.

A Winter Landscape. Closes Saturday, Jan. 30th, 1909.

A Portrait by Artificial Light. Closes Saturday, Feb. 27th, 1909.

A £5 lens for 50/-

IS THE VALUE GIVEN IN AN

"EURYPLAN" ANASTIGMAT.

Staley's celebrated lens gives complete satisfaction everywhere; it is perfect; suits all descriptions of work; while in buying it you save money; see reports—

Gentlemen,

18th August, 1908.

"I have much pleasure in informing you that I secured three 1st prizes in a local Photographic competition in which there were but four classes; I attribute my success in a large measure to the excellence of the $\frac{1}{5.6}$ Euryplan Anastigmat you fitted to my camera last Autumn. I never wish to use a better instrument."

This is only one of numbers of letters we have received.

Write for price list, containing extracts from Kew certificates, and testimonials and particulars of free trial in any part of the world.

A. E. STALEY & CO., Opticians, Lens Manufacturers, and . . .
Specialists in Photographic Apparatus,
19, Thavies Inn, Holborn Circus, London, E.C.

THE TELLA REFLEX

IS THE

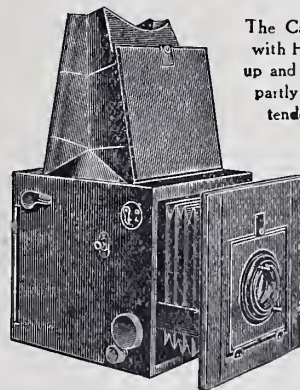
SMALLEST, LIGHTEST, AND LATEST REFLEX CAMERA.

There is

**NO
VIBRATION**

whatever when the shutter
or mirror is released, a
point that all reflex users
will appreciate.

The quarter-plate size measures only 6 by 5 by $5\frac{1}{2}$ inches; complete with lens it weighs only $2\frac{1}{2}$ lbs. It is therefore far and away the *smallest* and *lightest* reflex type of camera made. It is the minimum reflex. The focal-plane shutter is of novel design: one movement adjusts both the blind aperture and shutter-tension, simply by turning a small knob. The speeds vary from $\frac{1}{5}$ th to $\frac{1}{1000}$ th second, and time exposures can also be made. The extension is very long, being twelve inches on the quarter-plate size. The rack focussing is let into the body of the camera, ensuring extreme rigidity of the front at fullest extension. The camera has reversing back.



The Camera
with Hood
up and Front
partly ex-
tended.

Our Second-hand Camera Department will be pleased to allow best possible exchange value for high-class apparatus to purchasers of Tella Reflex.

PRICES.—Camera and 6 slides only: $\frac{1}{4}$ -plate, £10 10s.; 5×4 , £17 15s.; Postcard, £17 15s.; $\frac{1}{2}$ -plate, £24. Fitted Ross Homocentric Series III. $f/6.3$ Lens: $\frac{1}{4}$ -pl., £14 15s.; 5×4 , £22 5s.; Postcard, £22 5s.; $\frac{1}{2}$ -pl., £29 10s. Prices with other lenses post free on application. Write for the book of the Tella Reflex.

THE TELLA CAMERA CO., 68, HIGH HOLBORN, LONDON, W.C.



"The time has come, the Walrus said, to talk of many things."

I HAVE received from some person or persons unknown a postcard upon which is stuck an advertisement cut from the columns of a paper with a name too long to quote without being suspected of a desire to fill space with irrelevant and uninteresting matter having no real bearing on the subject under consideration, and therefore from every point of view much better omitted so as not to call forth editorial or readerian comment of an adverse and unflattering character.

* * *

The advertisement offers information as to a method of making money. This sufficiently accounts for its being sent to me. It is addressed to amateur photographers only; from which we may deduce that the professional is either free from the necessity of making money, or else has not the ability to succeed in the attempt if he tried. The offer runs—"How to make your quarter-plate or half-plate camera earn you from 10s. to £3 per week. Particulars and professional secrets sent on receipt of 2s. 6d. P.O." Of the merits of this offer I say nothing. No doubt it is perfectly genuine and straightforward, and clearly the information is dirt cheap. I only wish I knew how to make my cameras earn money. It would then be possible for me to pay for them. As it is, they loaf away their time in their cases and do absolutely nothing but warp, and rust, and go mouldy. Never have I known one of them to start out smartly on its own account for a good day's work, and come back at night with its brow wet with honest sweat and its bellows bulging with money. The wretched things should jump around, I'll warrant, if I only had the half-crown to purchase the secret of compulsory camera labour.

* * *

Somehow this advertisement reminds me of another class of offer in which someone agrees to acquaint you with a certain and rapid means of accumulating a Rockefellerian fortune in return for six stamps. I often wonder why these philanthropists do not put their own system into practice rather than resort to the slow and precarious method of acquiring unused philatelic specimens from confiding innocents. There was once a man who offered for a humble shilling to tell anyone how to make money, and those who sent him a shilling received a printed slip advising them to gather in shillings in the same way as he himself was doing. For obvious reasons I have never requested payment for the information, but I have more than once pointed out on this page how photographers may make money by their work. For example, it is easy to get half a guinea for the reproduction of a striking and original print in one of the illustrated papers. This is beyond dispute. Very well; it is only necessary to do six of these a day and get them accepted, and it is obvious to the meanest intellect that there will result an actual profit of about a thousand a year. This is, as you see, well above the maximum suggested in the advertisement, and you don't have to pay half a crown for the tip.

* * *

I admit that the real value of the offer in the advertisement may lie in the professional secrets included in the parcel. But I have my doubts. I know ever so many professional secrets, but I never dream of tying them up in bundles for sale. Anyone is more than welcome to them for nothing. Here are some: The superb "platinomattes" at two guineas per dozen cabinets are only bromides. The new studio camera is not paid for. It is never likely to be. The same may be said of the magnificent backgrounds. And the furniture. The samples in the showcase were bought from another professional. They are not paid for. There is no gold in the toning bath, and never was. The superb young lady in the reception room removes her hair at night; likewise her teeth; also, let us say, her boots. The label on a

certain much-used bottle in the dark room mis-describes the contents. Although the operator wears long hair and no collar and describes himself as a trained artist, he was brought up as a tinker. These are enough to go on with, although there are plenty more in stock; and I now advise all readers to send off their half-crown for the other chap's bargain parcel and see if they get better value than I have given them.

* * *

I read that some poor press photographers have been catching it pretty warm in their search for half-guinea subjects. They were engaged in the apparently laudable occupation of securing snapshots of an American king of finance. An American king of finance is something in the form of a man who makes a huge fortune by ruining everybody, including himself. This particular specimen was sentenced to fifteen years' hard labour, and then let out on nominal bail to give him the chance to flee. Here was the golden opportunity of the press photographers. They lined the route, and got busy as the finance king passed on his guileless way. But the king did not approve of their well-meant and lucrative intentions. He smashed a camera, and consoled the owner for its loss by presenting him with a black eye. He then warmed to his work, and proceeded to punch all the other "knights of the camera" (vide report) swearing horribly all the time. I don't quite see what he wanted to swear for. He might safely have left that part of the performance to the "knights of the camera." They can do that part of the show quite adequately without extraneous assistance. Besides, it gives one the impression that the king was not taking that real pleasure in knight-punching that one would have expected. And, after all, it is poor sport punching press-photographers and gratuitously bestowing upon their optics the painted glories of the Aurora Borealis. I have several times expressed my disgust at the rabbit-hearted way in which the brave "knights of the camera" accept without a murmur the unasked compliment of a black eye, or the doubtful advantage of a gory nose. If I were a press-photographer I might be punched once, peradventure, when taken at the disadvantage of having my head under the focussing cloth. But not twice. Not even by an American king of finance. Part of my photographic outfit would consist of a pair of those steel boots beloved of knights of pre-photographic days—those boots whose toes develop into a beautiful spike, resembling to some extent Hogarth's famous line of beauty. I should wear those boots. Nay, more, I should put them to potent service. I might receive a black eye, or even two; and my camera might be smashed, thereby giving a gaudy chance to the pound of dynamite previously concealed therein. But you can put it down as a fact that I should then be seen striding gaily back to my studio, with my knightly footgear gleaming bravely in the sun, and an American king of finance squirming ignominiously on each spike.

THE WALRUS.

SUBSCRIPTIONS.

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Six Months	3 3	Six Months	5 5
Three Months	1 8	Three Months	2 9
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PHOTOGRAPHY. DECEMBER 1ST, 1908.

PHOTOGRAPHY

A JOURNAL FOR EVERY CAMERA USER.

EDITED BY R. CHILD BAYLEY.

PUBLISHED WEEKLY.

DECEMBER 1ST, 1908. TUESDAY. No. 1,047. Vol. XXVI.



HOME LESSONS.

BY D. C. MURDOCK.

EDITORIAL

Two Subjects.

The interest of this issue of *Photography and Focus* is concentrated on two subjects, one of which has a very decided bearing on the other. Gaslight printing, as we announced last week, plays the most prominent part in the issue, but the near approach of Christmas, and the knowledge that many of our readers intend to let some of their own photographs act as the medium for the expression of their good wishes, has led to the inclusion of two articles upon home-made Christmas cards. We shall be glad to see what success is obtained, and have therefore arranged for a Christmas card competition, full particulars of which will be found on page 607 this week. This competition must not be confused with the "Special Subject" competition for a picture suitable for use as a Christmas card. The new competition is for the complete card, not merely for the photograph, and the general design and decoration of the card will be taken into consideration. It will close on December 24th, so it should not clash in any way with the "Special Subject" competition closing on the 31st inst.

A Word to Competitors.

It is quite clear from the requests that are made to us at different times that the majority of those who take part in the competitions organised by *Photography and Focus* have no idea of the vast number of prints that are dealt with every month. We are glad to know that we have acquired a reputation for dealing with these competitions promptly and efficiently; but to get and to maintain this reputation each has to be dealt with strictly according to system. Were we dealing with only a few dozen prints, it would be possible to permit departures from the system which are quite out of the case when they are numbered not by dozens, but by hundreds, or in some cases by thousands. We would ask competitors to note, therefore, that only prints which comply strictly with the few simple regulations we find it necessary to impose can be dealt with. If they are wanted back, for example, postage must be enclosed; they cannot be singled out from the rest and put aside to be called for. When coupons or stamps have to "accompany" prints, those coupons or stamps must reach us in the same package as the prints, and not in a separate envelope. Irreplaceable or otherwise valuable prints, we need hardly say, should not be sent in to any

competition. Finally, letters referring to competition prints cannot be dealt with. If a letter has to be written to the editor dealing in any way with a photograph, a copy of the print quite apart from that sent in to the competition must accompany the letter. It will be seen, if the subject is given a moment's thought, that these are not arbitrary stipulations or an undue development of red tape, but follow inevitably from the large number of prints with which in these popular competitions we find we have to deal every month.

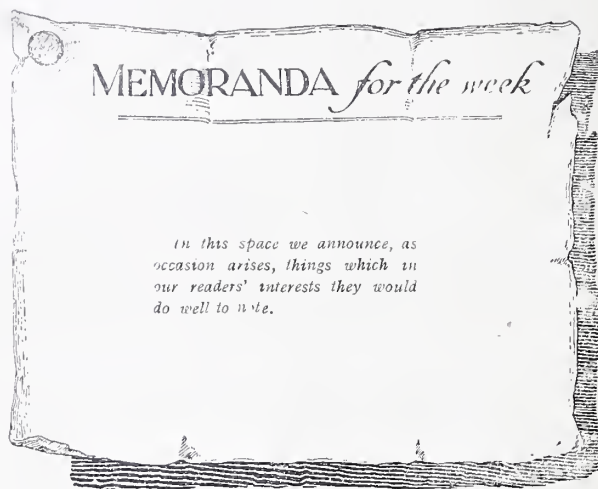
"History Repeats Itself."

No phrase is more frequently used and more completely ignored than this. It is impossible for an impartial outsider to read the outcry of the older workers whose photographs have been so ruthlessly turned out of the Salon this year without being struck by the fact that their attitude is precisely identical with that of their predecessors who protested against the work shown at the early Salons. It is simply the march of events which has gone by and left them, as it left the others ten or

fifteen years ago; and nothing can be more certain than that the work which is looked upon as *outré* in 1908 will be the merest commonplace of the exhibitions ten years hence. It is not a pleasant thought for those who are being left behind, and all the less so because in their heart of hearts they must be conscious that it is only too true. These things travel in cycles, and those who lead the van to-day are as inevitably in the rear in a few years time as anything else governed by an inexorable law of nature.

P.O.P. and Permanence.

Considerable prominence has been given in the columns of *Photography and Focus* recently to the question of permanence, particularly the permanence of P.O.P. prints toned either in the combined bath or in separate toning and fixing baths. We have now received a copy of a paper which Messrs. A. and L. Lumière and Seyewetz have just published, which deals with this topic, and gives details of a number of very interesting and valuable experiments which they have carried out. The general idea has been undoubtedly that the presence of lead in the combined bath has an injurious effect on the permanence of prints toned in it. The experiments referred to have been made by keeping prints produced under various conditions for seven years in cardboard boxes in damp cupboards.



The Results of the Experiments.

The results showed the popular apprehension of the presence of lead to be a mistake. Preliminary trials proved that the indispensable condition of permanence was the complete elimination of the hypo. The presence of the smallest quantity of this in the print when exposed to damp air, whether toned with gold alone or with the addition of lead, caused rapid fading. When the prints were freed completely from hypo they retained their original freshness for seven years when toned and fixed in a combined bath containing gold, whether a salt of lead was or was not present, and whether the toning was very strong or only slight. Prints toned in combined baths containing lead, but not containing gold, showed more or less deterioration. Where toning and fixing were performed separately the presence of lead in the toning bath had no ill-effects. The substitution of a salt of tin for the lead in a combined bath had an unfavourable influence on the permanence of the prints. Finally, prints that were toned with hypo-alum (without any gold or lead) showed no deterioration. The conclusions drawn are that the active agent in the fading of P.O.P. prints is the hypo that is left in by imperfect washing, and that the presence of a salt of lead in a combined toning and fixing bath which contains gold has no injurious action on the permanence of the prints. Messrs. Lumière add that this apparently confirms what analysis had already shown, that such prints do not contain any lead.

Easy to Follow.

A reader having recently asked "The Gentlewoman" about a suitable photographic journal was advised to "try *Photography*, very good indeed and easy to follow." We are very glad to have our contemporary's good word, and are especially grateful for the concluding phrase, because it exactly hits off what it is our aim to make and keep the paper. We want every reader to find it "easy to follow," not to be pulled up sharp by abstruse technicalities, by mathematical signs, and chemical formulæ, and not to be puzzled by inconsistencies. Our readers, we imagine, are not so much ambitious to pass examinations in theoretical photography as to improve their work, and to get more amusement and better results from their hobby. To that end we avoid as far as possible such contradictions as are involved in glorify-

ing tank development or the Watkins time developer one week and tentative development and the alleged control in development the next. One of these views must be wrong, and when a journal adopts them both it is not only altogether confusing to its readers, but contradictory. "Easy to follow" is what *Photography and Focus* has got to be, and "easy to follow" is doubtless what its readers wish it.

I don't know how it is, but yet, despite all tips and hints,

I always make a mess when'er I trim and mount my prints.

I've tried all sorts of cutting tools with edges sharp and keen,

But yet the borders of my prints are never straight and clean;

The paper puckers up and tears; I breathe a muttered curse;

The edges of the print look like the last line of this verse.

My trimming boards and cutting shapes are always well employed,

Yet forms rectangular my prints seem somehow to avoid.

I keep on chopping off the sides until my ten by eights Are gradually diminished to the size of quarter-plates.

The sides are then not parallel; I find these prints of mine

Have gently sloping edges which are somewhat like this line.

With mountants, too, I fail, though I've manipulated lots;

My shelves are with adhesives filled, in tubes as well as pots.

If prints are straight upon the mounts, to stick the mountant fails,

But if the prints are on askew they're held as hard as nails.

Yet here my troubles do not end, for when the mounts have dried,

They curl towards the print somewhere inside the centre, with the

Photography in the Winter Evenings.

As announced last week, we have arranged to give, during December, special attention to indoor winter photography, each of our issues during this month dealing with some particular branch of the work. There will be much in these specially directed to those who are, comparatively speaking, beginners. The series commences with the manipulation of gaslight paper, as this is especially a beginner's process. This, accordingly, is dealt with in this number of *Photography and Focus*. The complete list of the various issues, and the subjects with which they deal, are as follows:

Dec. 1.—Gaslight Papers.

Dec. 15.—Lantern Slide Making.

Dec. 29.—Negative Making

Dec. 8.—Bromide Papers.

Dec. 22.—Enlarging Methods.

Winter Evenings.

The publishers ask us to point out that they will be pleased to send a specimen copy of one of these issues to any photographer with whose address they are furnished by a reader; so that those who would like to draw the attention of their friends to the series need only send a postcard to Messrs. Iliffe & Sons Ltd., at 20, Tudor Street, London, E.C.



WARM TONES ON GASLIGHT PAPERS BY DEVELOPMENT.

BY "PRACTICUS." Special to "Photography and Focus."

VERY little has appeared in print during the last few years on the subject of obtaining warm tones on gaslight papers by development alone, although when these papers first became popular several of the makers gave formulæ and instructions for doing so. The idea that the process is a difficult one, or one that may involve many failures, is perhaps responsible for this. The impression doubtless arose from the attempts of photographers to get a wide range of colours at will—a thing which may perhaps be possible, but which is very difficult. On the other hand, I have found that by sticking to one certain composition of developer, and also aiming at the production of the same warm tone, the process is as simple and as regular as the black tone process on the same papers.

No doubt different makes of paper differ in their behaviour in this respect. My own experiences have been limited to Velox, Dekko, and Wellington S.C.P., and I have at different times obtained fine sepia prints on all these papers. The last-named is what I have been using lately, and the procedure which is described below is applicable to S.C.P. without any modification. With other gaslight papers the exposure may not be affected quite in the same way, and I am not in a position to say that the developer is exactly what would be wanted; but, speaking from memory, I believe it to be the same as that which I used quite satisfactorily for Velox and Dekko.

To make up the developer, forty grains of adurol, one ounce of sodium sulphite, one ounce of sodium carbonate, and forty grains of potassium bromide are dissolved in a pint of water. The order of the addition of the various chemicals does not seem to be important, and in my own case I simply place them all in a bottle which holds a pint, fill it up with water, and give it an occasional shake. It is best to make up the developer the day before it is wanted, as this gives time for the whole of the chemicals to dissolve. In a well-stoppered bottle the developer keeps in working order for some weeks; but it is certainly better when it is first made up, and it has a bad habit of making the stopper stick fast in the bottle. A cork would be better on this account, but it is doubtful if it would keep so well in a corked bottle.

The exposure for this developer must be much longer than when the prints are to be developed with the ordinary metol-hydroquinone for black tones. About five times the normal will be found to be correct, but it is not safe to make a hard and fast rule, as the increase depends upon the character of the negative used. The stronger this is in contrast, the greater must be the proportional increase. If after development the print has insufficient contrast, the exposure has been too long; if it is too strong in contrast it has been too short.

Magnesium ribbon is more convenient than either gas or lamplight for exposing for warm tones, as the time becomes very long when the illuminant is an ordinary gas burner. The magnesium ribbon, too, is easily measured, and is sufficiently uniform in character, so that when equal lengths are burnt at a fixed distance the exposures may be relied upon as identical. The most convenient distance is a foot, and a spirit lamp or candle should be set up at this (measured) distance from the printing frame. The ribbon can then be lit in the lamp and held at about that distance until it is burnt out. Four inches will be found to be about correct for a negative of a very clear character, free from any trace of stain, but with ample density. With thin negatives an inch may be enough.

Owing to the fact that adurol is itself not a rapid developer, and that in this case also it is strongly restrained, the action of the developer is a very slow one. As the paper is, of course, sensitive to light while it is in the developer, a card must be provided and the dish kept covered except just when the progress of development is being examined. At ordinary temperatures development is complete in about 2½ minutes.

Fixing is carried out as for black tones. I prefer to rinse the prints in two or three changes of water between developing and fixing, and to use an acid hypo bath, prepared by



THE LOCK-KEEPER'S COTTAGE.

By J. ARTHUR HILL.

Awarded a Certificate in the Beginners' Competition for September.

adding a little potassium metabisulphite to the plain hypo solution. The actual quantity added is not important. I never weigh it, but put about as much as could be heaped on a penny into a pint of hypo solution. Washing, etc., are conducted exactly as with black-toned prints.

I think that amateurs who work on these lines will have no difficulty in getting prints of a very agreeable brown colour, with very little waste. It is only when attempts are made to vary the colours by constant changes in the composition of the developer, and in the time of exposure to correspond, that the pile of spoiled prints begins to grow, and the process begins to appear difficult.



THE WEEK'S MEETINGS.


MONDAY, NOVEMBER 30TH.

Leek P.S. "Velox Paper." W. F. Slater.
 Scarborough & D.P.S. C. P. Goerz Co.'s Slides.
 Canterbury C.C. "Yesterday and To-day." Burroughs-Wellcome.
 Southampton C.C. "Carbon Process." A. E. Henley.
 Bradford Grammar School P.S. "Flattering Portraits." H. E. Wroot.
 Bowes Park & D.P.S. "Oil." H. Stuart.
 Bournville & D.P.S. Criticism Evening.
 Bradford P.S. Five Minute Papers by Members.
 Cleveland C.C. Lantern Slide Making and Exhibition of Members' Slides.
 Preston C.C. "Orthochromatics." H. Wade.
 Kidderminster & D.P.S. "The Photographic Lens." C. P. Goerz.
 Bedford C.C. "Exposure and Development." J. S. Smith.

TUESDAY, DECEMBER 1ST.

St. Helens C.C. Thornton-Pickard Prize Slides. R. Hesketh.
 Manchester A.P.S. "Velox Paper." W. F. Slater.
 Chiswick C.C. "Lantern Slides Making." J. Woodger.
 Forest Gate C.C. Lantern Slides by Members.
 Slough P.S. "Stereoscopic Photography." C. P. Goerz.
 Blackpool & Fylde P.S. "Carbograph." E. A. Noble and F. Winning.
 Bootle P.S. L. & C.P.U. Lantern Slides.
 Glasgow Southern P.A. "Colour Photography." R. Child Bayley.
 Sheffield P.S. "The Sun's Part in Photography." E. J. Marsh.
 Leeds P.S. "Natural History Photography." Riley Fortune.
 Otley & D.C. & Art S. "Pigmoll." F. Fearnley.
 Monklands P.S. Opening of Exhibition.
 Keighley & D.P.A. "The Austrian Alps." C. B. Howdill.
 Nelson C.C. Musical Evening.
 Worthing C.C. "Old Sussex Churches." John King.
 Hackney P.S. "Mounting." A. J. Linford.
 Northamptonshire N.H.S. & F.C. Toning Bromide Prints. H. E. Cooper.
 Blackburn & D.C.C. Lecture for Beginners. W. Duxbury.
 Padiham P.S. "Bromide Toning." J. Booseck.
 Birmingham P.S. Prize Slides.
 Nelson P.S. Affiliation 1907 Slides.
 Liberal Border City C.C. "Rambles in Cumberland." J. Robinson.

WEDNESDAY, DECEMBER 2ND.

Borough Poly. P.S. "Novel Lighting Effects." H. Essenhigh Corke.
 Kinning Park Co.-op. Soc. C.C. "Oil and Gum." A. W. Hill.
 Coventry P.C. Prize Slides.
 Sheffield Friends' P.S. "Birdnesting with a Camera." J. R. Stamp.
 Dukinfield P.S. "Velox Paper." W. F. Slater.
 Huddersfield N. & P.S. "Photographic Attempts to get off the Beaten Track." A. Houghton.
 Rochdale A.P.S. "Gum Bichromate." Dr. A. T. Lakin.
 Wimbledon Park P.S. Members' Slides.
 Edinburgh P.S. "Photography and Ornithology." Rev. H. N. Bonar.
 Isle of Thanet P.S. "Ozobrome." Rev. H. W. Dick.
 Sale P.S. Members' Slides.
 Leeds C.C. "Real Orthochromatism." S. E. Bottomley.
 Monklands P.S. "A Camera in Paris." G. A. Jack.
 Woodford P.S. "Yesterday and To-day." Burroughs-Wellcome.
 South Suburban P.S. "Ancient Churches of Essex." C. Forbes.
 Croydon C.C. Print Mounting Competition.
 Preston Scien. S. "Ruskin." Rev. W. H. Shaw.

THURSDAY, DECEMBER 3RD.

Hull P.S. "Humble Beauties of the Flower World." E. Seymour.
 South-end-on-Sea P.S. Competition Prints.
 Heaton & D.C.C. "Wellington Specialities." Harry Wade.
 Ilford P.S. "Pictorial Composition." P. Bale Rider.
 Wembley & Sudbury C.C. "Velox Paper." W. F. Slater.

Societies will have their meetings announced here if the syllabus is sent to us at the beginning of the Session, or from time to time.

[THURSDAY, DECEMBER 3RD] (continued).

Wimbledon & D.C.C. "Afar in the Fatherland." W. L. F. Wastell.
 Liverpool A.P.A. "Velox Paper." W. F. Slater.
 Brighouse P.S. "A Scamper on the Continent." J. Ingham Learoy.
 Armley & Wortley P.S. "Principles of Art." A. Keighley.
 Batley & D.P.S. "Lantern Slide Colouring." F. E. Fearnside.
 Midlothian P.A. "Composition and Selection." J. C. Noble.
 Ealing C.S. "Cycle and Camera in Cathedral Land." Messrs. Portway.
 Small Heath P.S. "Photographic Exposures." E. A. Biermann.
 Hanley P.S. "Bromide Toning." T. Hartley.
 Bromley C.C. "Cities of Italy." Rev. Bedford.
 Richmond C.C. Members' Slides.
 Weybridge & D.P.S. "Composition in Landscapes." F. Read.
 Bolton A.P.S. "Pictorial Photography." A. W. Cooper.
 Hastings & St. Leonard's P.S. Affiliation Slides (1908).
 Watford C.C. "The Lake District."
 Paisley Philosophical Inst. "Mona's Isle." Rev. J. Crouch.
 North Middlesex P.S. "Ely Cathedral." H. W. Finchman.
 L. & P.P.A. "The Talking Photograph." T. Bedding.
 Peterborough P.S. *Photography and Focus* 1908 Prize Slides.

FRIDAY, DECEMBER 4TH.

Sutton P.C. "Printing on Bromide Papers." Andrew Pringle.
 Photo Art Club. "The Decorative Element." J. A. H. Hector.
 Oliver Goldsmith P.S. "Beauties of Yorkshire."
 Buxton C.C. "Velox Paper." W. F. Slater.
 Colne C.C. "Microscope and Camera." W. E. Dean.
 Birkenhead P.A. "The Romantic in Landscape."
 Glasgow Southern P.A. Sale of Work.
 Monklands P.S. "Rambles in Auld Reekie." Mr. Coghill.
 Lincoln A.P.S. "Beardoid Photography." Leto Co., Ltd.
 Mill C.C. "Photographic Chemical Experiments." E. Cooper.
 Sidcup C.C. "Development." F. C. Staines.
 North Middlesex P.S. "The Thames." J. McIntosh.

SATURDAY, DECEMBER 5TH.

St. Helens C.C. "Velox Paper." W. F. Slater.
 North Middlesex P.S. "Afar in the Fatherland." W. L. F. Wastell.
 Edinburgh P.S. *Photography and Focus* 1908 Prize Slides.

MONDAY, DECEMBER 7TH.

Walthamstow P.S. "Antiquarian Rambles in Essex." A. P. Wire.
 Wolverhampton P.S. "Preparation of Photographs for Exhibition." J. Gale.
 Manchester Y.M.C.A.P.S. "Velox Paper." W. F. Slater.
 Stafford P.S. "Carbon and Ozobrome." W. L. Hey.
 Scarborough and D.P.S. *Photography and Focus* Prize Slides.
 Canterbury C.C. "Half Hours with Nature." F. C. Snell.
 Southampton C.C. Affiliation Lecture.
 Bradford G.S. P.S. "India." Mr. Goodrich.
 Oxford C.C. Affiliation Slides.
 Wailsey A.P.S. Union Slides.
 Bowes Park and D.P.S. Beginners' Class. Technical Demonstration.
 Catford and F.H. P.S. "Kent and Surrey with Walker Miles." A. Bedding.
 South London P.S. Lecturette Competition.
 Leek P.S. Monthly Lantern Night.
 Bournville and D.P.S. Slide Making.
 Cleveland C.C. Enlarging Night.
 Bradford P.S. "Large Bromide Prints from Small Negatives." A. Bracewell.
 Kidderminster and D.P.S. Prize Slides.
 Cripplegate P.S. "Bromoil." F. J. Mortimer.
 Glasgow & W. of S. A.P.A. "Mounting and Finishing the Exhibition Print." J. M. Kissack.
 Preston C.C. "Control in Slide Making." T. H. Greenhall.
 Scarborough and District P.S. *Photography and Focus* 1908 Prize Slides.

A Christmas Card Competition. Rules and Prizes.

WE offer a signed copy of "The Complete Photographer," the half-guinea work by the Editor of *Photography and Focus*, now in its second edition, to the sender of the best photographic Christmas or New Year card. The sender of the second best will be allowed to select photographic books to the value of five shillings from Messrs. Liife and Sons' list; and the sender of the third best, books to the value of half a crown.

The cards must be either wholly or in part photographic; the photographic part must be the work of the sender; commercial Christmas card mounts or sensitised cards may be used, but the extent of the competitor's own work in the finished card will carry weight in making the awards.

Each competitor may send in any number of cards, but each card must be posted separately, and each must bear the name and address of the sender.

The copyright of all cards, winning and otherwise, will remain the property of the competitors, but the publishers of *Photography and Focus* shall have the right to reproduce in that paper, without payment, any of the cards sent in.

No cards can be returned or criticised, nor can correspondence be entered into concerning the competition.

All cards must be addressed, "The Editor of *Photography and Focus*, 20, Tudor Street, London, E.C., and must be distinctly marked on the outside, "Christmas Card Competition." They must be sent by post, and must reach Tudor Street by the first post on Thursday morning, December 24th. Competitors are reminded that postal delays are to be expected near Christmas, so that ample time should be allowed, as no extension can be granted. All packets arriving with excess postage to pay are refused, so that care should be taken to see that the postage is fully paid.

Improving Gaslight Prints.

BY W. H. ALEXANDER. Special to "Photography and Focus."



IN spite of the greatest care in manipulation, it may sometimes happen that the amateur photographer gets a number of his gaslight prints which are not as good in colour as he would like them to be. Where the actual cost of the paper is not great, and the aim is to get the best possible result, then it is policy to put the poor prints on one side and to make fresh. But when economy is important it is not time wasted to endeavour to restore the

nature of the restoration process will depend upon the fault from which the prints are suffering. If they have been over-exposed, or, what comes to the same thing in the present case, if they have been printed from an extremely thin negative, so that the shadows are all a dark black, or greenish black, a great improvement can be brought about by a slight but rapid reduction with ferricyanide and hypo. It will not turn the greenish black into a pure black, but if it is not carried too far will give the deepest shadows a grey tint, which will be a great improvement on what they were before. It will at the same time increase the contrasts.

Few people, I imagine, make their ferricyanide and hypo reducer by weighing and measuring. It is so much simpler, and at least as reliable, to tell its strength by the colour, and one soon gets to know the tint which is needed. For a half-plate print, we may take an ounce of the stock hypo solution (of four ounces to the pint) and add to it a couple of ounces of water. A crystal of ferricyanide, in size between a pin's head and a split pea, is crushed and dissolved in an ounce of water, and when it is quite dissolved this is poured into the hypo. The mixture must be used at once. The print may be full of hypo just as it emerges from the fixing bath, but it is better to give it a rinse at least before putting it into the reducer. If it has been washed and dried, it should be soaked for a few minutes in cold water. The reducing action is very rapid, and must be closely watched. Just before it seems to have gone far enough, the print is quickly poked out and washed in running water for a minute or so. It is then washed just as it would be if it had come straight from the fixing bath, and dried in the usual way.

But the most effective alteration in defective gaslight prints is that which is brought about by bleaching

and redevelopment. However rusty and unpleasant the colour, this method will restore it to a good vigorous black, if it is properly carried out. The prints are first of all bleached in ferricyanide and bromide, just as if they were going to be toned with sulphur. This can only be done after the print has been well washed after fixing.

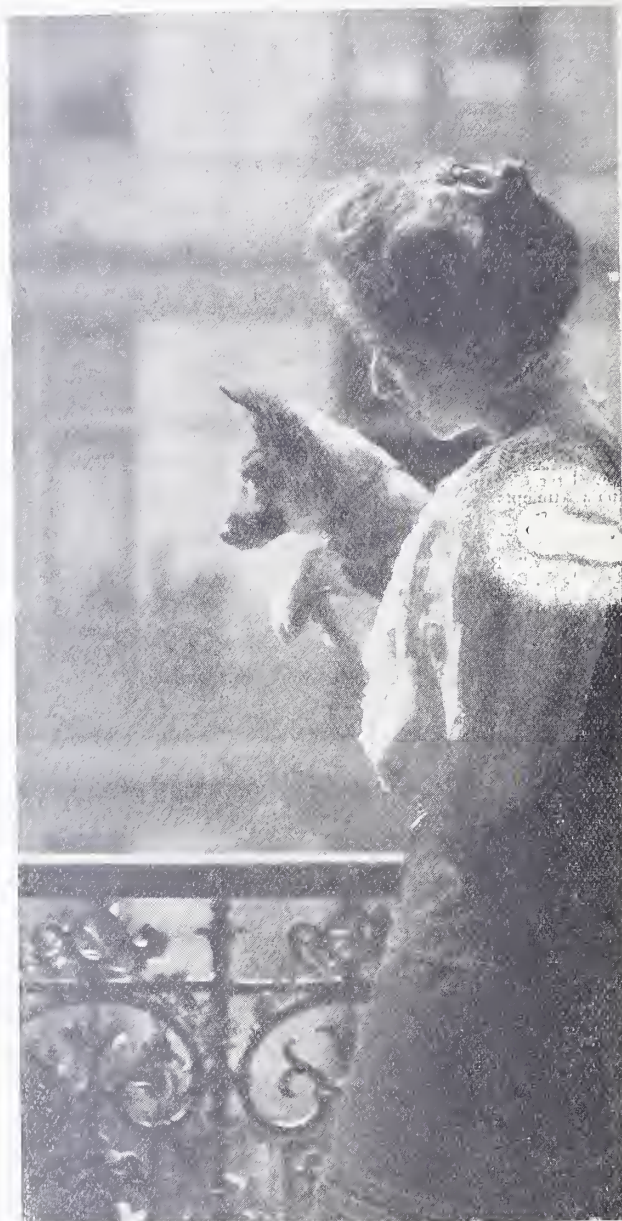
There are many formulae for the bleacher, but a hundred grains of ammonium bromide and a hundred grains of potassium ferricyanide in ten ounces of water form a convenient strength. The print is placed in this until the image is turned of a pale yellowish brown colour. No harm results from leaving it in for a minute or two after the action seems complete; it is best to make sure that it is quite thorough.

The print is next washed in half a dozen changes of water for about ten minutes, and is then simply developed again, in the same way in which it was originally developed, in a suitable developer.

The writer finds that the developer which gives the best results with bleached prints is one made by taking four grains of metol, twelve grains of sodium sulphite, and twenty-four grains of sodium carbonate to each ounce of water. The metol should be entirely dissolved before adding the sulphite. No bromide is added to the developer, and there is no need, of course, for the development to be conducted in a dark room; in fact, all the operations should be carried out in a good light.

The action is rapid, but, as in the bleaching, the print should not be taken out the moment it seems to be finished. There is no necessity to fix the print after this redevelopment, but it should be washed for at least ten minutes in several changes of water.

This process is not applicable to prints which are too heavy, for which purpose the reduction with ferricyanide and hypo is more useful. But redevelopment not only improves the colour of a print, but increases its contrasts so that it is distinctly advantageous to a print inclined to be a little weak.



AWAITING PAPA.

By F. FRANK

Awarded a Bronze Plaque in the Special Subject Competition.

Ten Defects in Gaslight Prints.

With Hints as to their Causes, and How they may be Remedied.

- (1.) A GENERAL greyness over the whole print, with nothing like a clear white anywhere.

This may be due to filling and emptying the printing frames in too strong a light, so that the prints get fogged. It may also be caused by too strong a developer, or by one that has too much of the alkali or carbonate present in it. If amidol is used, too much sulphite in the developer produces the same result. It should be pointed out that over-exposure followed by insufficient developer gives a closely similar effect, as also does the use of a negative with insufficient density, but these two cases may be distinguished from the others by the fact that any portion of the paper completely protected from light, either by a mask or by the rebate of the printing frame, remains quite white, if it is simply the fault of the negative or of the exposure; whereas if it is light fog, or is due to too strong a developer, the action extends alike over the exposed and the unexposed portions.

- (2.) PRINTS are too dark all over.

The cause of this is generally correct exposure with over-development, which may be brought about either by leaving the print too long in the developing dish, or by being too slow in rinsing the developer out of it, and putting it in hypo. With prints developed with amidol an acid fixing bath sometimes causes this defect. It may also be brought about by over-exposure with correct development. There is no satisfactory remedy, although reducing may improve matters. It is better to make a fresh print.

- (3.) PRINTS are too light and much of the detail in the highest lights appears weakly as black white paper.

Insufficient development may cause this, but it is very improbable, since the photographer on seeing such an appearance naturally continues development in the hope that that will remedy it. The most likely cause is under-exposure.

- (4.) THIN black lines on the prints, looking like scratches, irregular dark marks noticeable particularly in the high lights and in masked prints on the margins, a defect seen much more frequently in prints on glossy paper than with any others.

These are known as stress marks, and are caused by the paper being scratched or pressed before development. They may be brought about by drawing the sharp corner of one piece over the face of another, by the edges of the packet or cards used for packing, or by a blow or pressure on the packet of paper. It is not always possible to prevent them, but when they occur they can generally be got rid of without much trouble. To do this after the print is fixed and washed its face is well rubbed over with a soft sponge, or failing that a ball of cotton wool. This removes all but the worst of the marks. If there are any left the print must either have an iodine-cyanide reducer flowed quickly over its surface, followed immediately by washing and drying, or the dry print must be rubbed with cotton wool very slightly moistened with methylated spirit. It must be almost dry, so that after rubbing the print for a moment the face of the wool is blackened, showing that so little spirit has been used that it has been given the required tooth. The reducer above mentioned is made by adding to half a drachm of a saturated solution of potassium cyanide ten drops of tincture of iodine and diluting with two ounces of water. It is extremely poisonous.

- (5.) IRREGULAR patches of stain, yellow, brown, or black, which make their appearance in the fixing or in the first washing waters.

The print when it leaves the developing dish has its pores full of developer, and if this is left in them, especially if

exposed to the air, that developer will discolour and stain the print. Hence, it is usual to rinse the print before fixing to get rid of some, at least, of the developer. In the hypo, the print must not be allowed to lie on the surface of the solution where the air can get to it, but should be kept submerged. It should also be moved about from time to time, so that the hypo solution may help to wash out the developer. These cautions apply with equal force to the first one or two washing waters. After those there is no staining to be feared from this cause. A print may also be badly stained by coming into contact with bare metal while it is wet with either developer or hypo.

- (6.) BROWN stains which only manifest themselves after the print is dry. Perhaps only weeks after it is made.

These are not a common defect, and are due to insufficient fixing. The time allowed for fixing in the makers' instructions leaves so ample a margin, that nothing but the most gross carelessness would cause them; such as curtailing the time the prints are in the hypo very much, using hypo much too weak, or allowing the prints to lie undisturbed one on top of another in the fixing bath.

- (7.) GREENISH or brownish tones instead of a good black and white.

These are the result of using the same developer too often, or of having too much bromide in the developer. A very weak developer is apt to give rusty prints, and anything which tends to prolong development, such as very cold solutions, is favourable to the defect. Prints which are fully developed in half a minute or less will hardly ever be found to have a brownish or greenish colour.

- (8.) THE prints are stained yellow or brown all over (not to be confused with the image being a brown colour).

This may happen if development is carried on too long in the case of an under-exposed print, if the developer has been mixed up a long while and has deteriorated, or if some harmful chemical impurity has found its way into the developer.

- (9.) BLISTERS or bubbles of liquid forming between the paper and the coating on it. Generally visible in the fixing bath or in the first washing waters.

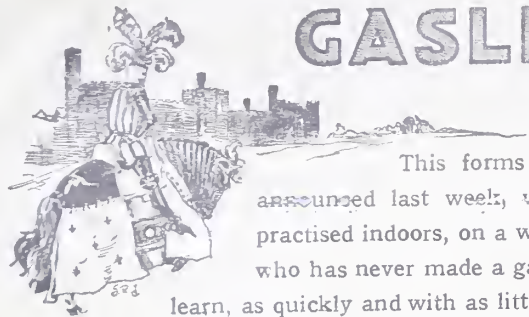
The chief cause of this defect is transferring the print from one solution to another at a greatly different temperature. Hypo when first dissolved makes an extremely cold solution, much colder than the developer usually is, especially in summer. In winter, if the stock solution of hypo is kept in the dark room, it may be much warmer than the tap water. Hence blisters are generally noticeable in the fixing or first washing waters. They may also be caused by putting a print into a very strong solution of hypo, or transferring it from a very strong solution to plain water. Blisters should not occur if the solutions are properly made up, and differences of temperature avoided. Strongly alkaline developers favour their formation, and they are far more likely to be troublesome in summer than in winter. An alum or a formalin bath before fixing, followed by several changes of water, is a preventive, but should not be necessary.

- (10.) DISCOLOURED edges to the prints extending inwards for perhaps a quarter of an inch or more.

These are due to the use of stale paper, or paper that has been badly stored or not properly packed. If carefully packed, as supplied by the makers, in wrappings known to be harmless, gaslight papers appear to keep in first-rate condition indefinitely. Wrapped in impure paper they may be seriously affected even in a few days.

GASLIGHT PAPERS.

By The Editor. A Beginner's Article.



This forms the first of the series of elementary articles, which were announced last week, which deal with those forms of photography which can be practised indoors, on a winter's evening. It is written from the point of view of one who has never made a gaslight print in his life but is anxious to do so and wishes to learn, as quickly and with as little waste as possible, how to make good prints.

THE name "gaslight papers" is applied to a number of sensitive papers by different makers which are now on the market which resemble each other in these respects—that they are sensitive enough to allow the printing on them to be done by gaslight, but are not so sensitive as to require a dark room for development. If they need a dark room they are called "bromide papers." It must not be supposed from this that gaslight papers are not in the strict sense of the word "bromide" papers. The actual composition of the emulsion that is applied to them is the maker's secret; but it is very generally supposed that many of the gaslight papers only differ from "bromide" papers in speed, silver bromide being the basis of each. Be that as it may, photographers are agreed in calling the fast papers which must be developed by red or yellow light in the dark room "bromide papers"; and those which have to be developed also, but with which the developing can be done in ordinary gas or lamp light, "gaslight papers"; and each term is always used in that sense in *Photography and Focus*.

The beginner will very naturally wonder at first how, if the paper can be printed in gaslight, it can also be developed in the same light without fogging it. It is all a matter of strength of light. The printing is done six or eight inches from the gas burner with its light shining straight through the negative. The developing is done six or eight feet from the burner, and, as far as possible, the paper is kept in shadow until it is fixed, that is all. It must never be forgotten when handling gaslight paper that it is sensitive to the light in which the manipulations are being performed; and that if it is left exposed long enough, or if it is brought too near the light, it will be fogged. It will

be understood from this that gaslight paper is far more sensitive than P.O.P.—many hundreds of times, in fact. So sensitive is it that daylight, unless it has passed through yellow glass or fabric, must on no account be used when handling it. The electric arc light also would spoil it almost directly; and the light of incandescent gas should never be allowed to fall directly on an unprotected piece of gaslight paper, unless it is at least ten or twelve feet away from the burner. The manipulation of the paper can be carried out quite comfortably with ordinary gas or lamplight, or, with slight precautions, with incandescent gas. A fire in the room will not hurt it in any way.

There is one peculiarity about gaslight papers which should be noted at this stage. They are very liable to what are called "stress marks," and the glossy surfaced gaslight papers are more liable than any. These



An Illustration of "Silhouette Designs for Christmas Cards" (see page 616).

stress marks are caused by some slight rubbing or scratching of the face of the paper, such as might happen if the corner of one piece were drawn across the face of another. No sign of the rubbing would be seen at the time, but when later on we come to develop that piece of paper, the place where it was

rubbed will develop up into a black line, which will be a stress mark. As the paper is very susceptible to these marks it follows that it should be handled very carefully. The marks can be removed subsequently, with some little trouble and risk of injury to the print; but it is better to avoid them as far as possible.

There is one good feature about the ordinary forms of gaslight paper, and that is that they will give a bright picture with plenty of contrast, from a negative which appears to be quite a ghost. In fact, there is no other method of printing a thin negative which will compare in this respect with gaslight paper. On the other hand, if our negatives have plenty of contrast, still more if they have too much, the ordinary forms of gaslight paper are unsuitable. For such a case, special gaslight papers, generally distinguished as "Portrait" grades, are made. These give soft prints from strong negatives. Such grades are generally four times as fast as the ordinary, so that the exposures are much shorter; they must also be more carefully protected from unnecessary light during handling.

As gaslight papers have to be developed, no alteration is seen in the appearance of the paper during printing. There is just this exception to make to this statement, that sometimes with very hard negatives some of the outlines are faintly perceptible before development. Enough to be of any use as a guide cannot be seen, however, and we therefore have to depend entirely on timing to get the exposure correct.

When a packet of gaslight paper is opened and one of the pieces is taken out, at first glance the two sides may look alike, and the photographer may wonder how he is going to tell the back from the front. But a glance should be sufficient to show him that, however flat the paper may be, there is a slight curl to it somewhere, generally at the edges, but often all over it. The inside of the curl is always the sensitive side. There is no real difficulty in recognising the front in this way at a glance.

Before any attempt at printing is made, the solutions required for development and fixing should be mixed up. There is no magic in formulæ, and the best possible course is to use the formula given by the maker of the paper that is to be employed. Some makers give several formulæ, and some only one; but practically all give a metol-hydrokinone developer.

There is no doubt whatever that metol-hydrokinone is more suitable than any other developing agent for papers of this class. Amidol and rodinal are both used by many workers; but the beginner will do well to use metol-hydrokinone, at least at first, and to make it up strictly to the maker's formula. We mention this



BY THE LIGHT OF THE FIRE.

BY MISS IVY WESTON.

Awarded a Certificate in the Special Subject Competition for October.

because the composition of the developer seems to be more important in the case of gaslight papers than with either plates or bromide papers; and it does not at all follow that a metol-hydrokinone developer which is very good for either of the latter is any use for gaslight paper at all.

The fixing bath that is to be preferred is an acid-hypo one, except when amidol is the developer, when plain hypo is better. The strength of the fixing bath is not such a vital matter, and one made up by dis-

solving three ounces of hypo and a dram of potassium metabisulphite in a pint of water will do for all makes of paper. It need not be freshly mixed, but it should not have been used before.

When the developer and fixer are mixed up, all is in readiness for the printing. We will suppose that this is going to be done in an ordinary room, where there

stress marks, a piece is taken out of the middle of the pile. The end piece should not be taken, as this would leave the next with its sensitive surface against the packing card, and if it were put away for a week or two like that, it would almost certainly be spoiled. The paper is put into the printing frame, its back is closed, the packet is put on one side, and all is ready for exposure.

Here, much as we should like to give definite information, we cannot do so to be of any real use. The strength of the light, the make of paper, and above all the character and colour of the negative, have an enormous influence on exposure, and the only safe plan is to ascertain by actual trial at the time. It is easy; it should only mean the expenditure of one piece of paper, and it will tell us more than the actual exposure necessary.

To do this the printing frame is held at a distance of six inches from the gas burner. If the frame has a piece of wood tacked on to one edge of it, so as to stick out in front, the wood may be cut to such a length that when it is placed against a certain part of the gas burner the frame is six inches from the flame. This will be found a great help towards securing accurate exposures, as when the frame is so near to the light, a very little difference in the distance—say only an inch each way—makes a very great difference in the light. A print exposed five inches away receives more than twice the light

which reaches one seven inches away. Holding the frame at six inches distance, therefore, we give the whole of the negative an exposure of fifteen seconds. As soon as that time is elapsed, we cover a narrow strip along one edge of it with a piece of card, and continue the exposure until thirty seconds altogether have elapsed. A further strip of the negative is covered. At the lapse of one minute another strip is covered, a fresh one at the end of two minutes, and one more at the end of four. It will be seen that, as a result of



Tulips and China.

By George Gilbert.

is no water supply or sink; as this is the most comfortable way on a winter's night. A newspaper is spread on the table to save the cloth, and a board or sheet of card is propped up so that everything on the newspaper may be in shadow. A jug of water and a pail will be wanted, and two dishes. One of these is for the hypo and should be a deep porcelain one for choice; the other is for the developer, and should not be much bigger than the print, so as to economise solution. The packet of paper being opened carefully, on account of

this, we have a print the different parts of which have received respectively 15, 30, 60, 120, and 240 seconds exposure.

These figures are for ordinary, not "portrait," gas-light papers, exposed to an ordinary gas burner, or to a good paraffin lamp without a globe. If an incandescent gas burner is used, the distance should be increased to twelve inches, or else the exposures should be made 4, 8, 16, 32, and 64 seconds.

Placing the trial print face upwards in a clean dry dish in the shade of the card, the developer is poured quickly over it. No more developer need be used than will cover it easily and quickly, but if any part remains uncovered for a few seconds, it will of a surety make a mark that will be clearly visible on the finished print.

Almost immediately the developer reaches the print signs of the picture will begin to appear, and in less than half a minute it will look as if fully developed. When the action seems to be stopping, the developer is poured off, the print rinsed for a moment, and then placed in the hypo, pushed well underneath the surface, and after it has remained there for a few seconds is turned over and left face downwards for five minutes. It is then fixed, although the instructions to be on the safe side generally speak of ten or fifteen minutes in the hypo.

When the print is fixed, it may be taken out and examined close to the light. It will probably be found that one or more of the strips which received the least exposure are almost white paper, just the heaviest shadows showing, and these not very deeply. At the other end will be found most likely a strip which is very dark and heavy all over from over exposure. Between the two will be a strip nearly, if not quite, what we should like the whole print to be. The exposure of that strip is to be our guide for the next exposure. We shall, perhaps, find that the negative wants a little more or a little less than that strip received in order to get the best effect: but this can be gauged by looking at the trial print. We can then make a second exposure; when, if all has gone well, we shall get our first successful gaslight print.

It is best to rinse the print between development and fixing, but only for a moment; and it must not be done in any stronger light than was used for the development.

The prints must be kept moving in the fixing bath; and it is a very bad plan to let them accumulate there until a batch are ready for washing. The time prescribed by the maker for fixing should not be greatly exceeded, and the prints should then be given one or two changes of water. If preferred, they may then be put in a dish of water to wait until the whole batch is finished and ready for washing. Prolonged soaking in the fixing bath is very likely to stain them, and in some cases has a decided reducing action.

To wash a few prints quickly, two dishes or basins form a very convenient arrangement. The prints are taken from one to the other, two at a time, holding one print in each hand and allowing it to drain thoroughly before putting it in the clean water. When a basin is emptied of prints, the water is poured away, the basin well rinsed, and filled with clean water. The prints are then transferred back to it in the same way. If this is done seven or eight times, taking not less than half an hour over the whole of the changes, they may be regarded as properly washed.

This article has been intentionally kept of a very elementary character; and need not be burdened with details of other methods of development, exposing, etc. Nor need it be prolonged with cautions which, if the procedure described is strictly followed, will not be necessary. But one word of advice to old and new workers of the process may be added. If good prints of a fine colour are wanted, the development must be full—that is to say, no attempt must be made to take the print out of the developer as soon as the action seems to have gone far enough, as is done when developing a negative. The action must be allowed to go on until it perceptibly slows down, and if this gives us too dark a print, the exposure must be shortened. If instead of shortening the exposure when the print is too dark, the development is shortened, a flat, grey poor print will result.



A New Combined Toning and Fixing Bath.

Proposed Substitutes for Hypo.



USEFUL, in fact indispensable, as hypo is to the photographer, there are drawbacks to its use, which have led many experimenters to try to find some satisfactory substitute. The latest attempts in this direction have been made by Messrs. A. and L. Lumière and Seyewetz, and are described in a paper which has just been published by them.

Into the experiments themselves we need not go. The paper will be found in full in the "Bulletin of the French Society," where those who are sufficiently interested can consult it in the original French. We may summarise the results by saying that thiocarbamide and thiosinamine are the only two substances that appeared sufficiently promising, and that of these the thiocarbamide proved to be on several grounds preferable.

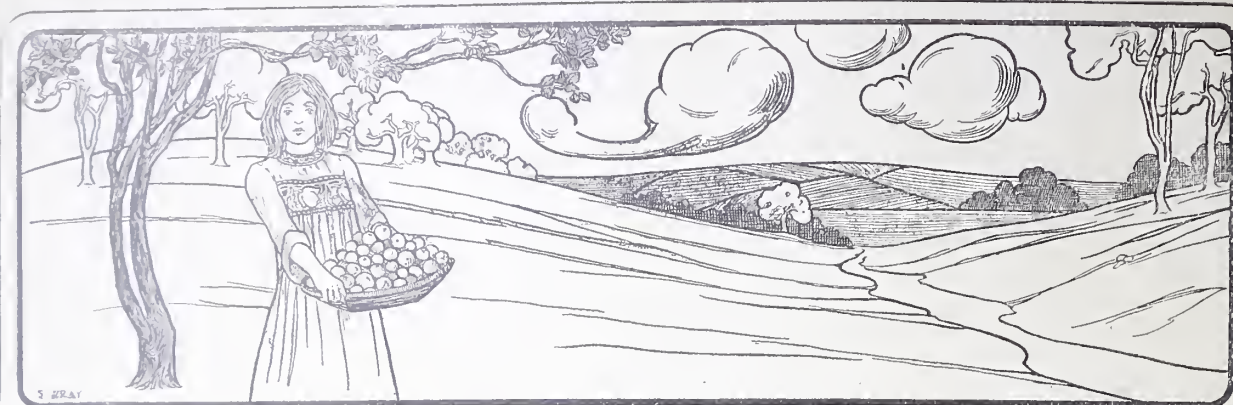
Thiocarbamide, it may not be generally known, is a solvent of silver chloride, and so may be employed as a fixing agent for P.O.P. It can also form the basis of a combined toning and fixing bath, which shall contain no hypo and no lead. The best results, say the authors, are obtained by the use of thiocarbamide, alum, and gold chloride only, and the following formula fulfils the necessary conditions:

Water	..	...	...	...	10	ounces
Thiocarbamide	...	...	...	...	250	grains
Alum	...	...	...	...	130	"
Gold chloride	...	...	...	...	2½	"

Prints in such a solution are fully fixed before toning is complete, which last operation takes about six minutes. The tones are very similar to those which are obtained with the ordinary combined bath.

A peculiarity of this bath which is likely to interfere considerably with any popularity it might otherwise have, is that the subsequent washing cannot be performed with ordinary tap water, as the alkalinity of this is sufficient to produce a decomposition, during washing, of the double silver salt and the thiocarbamide, producing black spots. To avoid these, either distilled water must be used for the washing, or a little acetic acid (one part in a thousand, not more) added to the washing water. Washing is complete after six or seven changes of two or three minutes each.

The conclusion to which Messrs. Lumière and Seyewetz arrive is that neither thiocarbamide nor thiosinamine present any great advantage over hypo, and, apart from other considerations, their high cost would further restrict their use.



THE LATEST IN APPARATUS & MATERIAL.

Butcher's Photographic Christmas Cards and Calendars.

ONE of the most comprehensive price lists of photographic Christmas cards that we have received has come to hand from Messrs. W. Butcher and Sons, Ltd., of Camera House, Farringdon Avenue, London, E.C. The cards form the well-known T.E.B. series, and range from the cheapest to the most costly, from the simplest to the most elaborate. The amateur photographer who cannot find something to his taste in this list must indeed be hard to please.

With the list came a collection of specimens, from which we may pick out one or two for notice. The Linette cards (No. 5,966) are certain to find a great many admirers. They consist of a plain card on which the print is mounted. Over this is a cut-out mount made of Linette paper—paper with the grain of a fabric—which cut-out is embossed with seasonable greetings, and is fastened to the card underneath by means of a bow of silk ribbon, by which, if need be, the card can

be hung up. All of these cards are most effective and in the best of taste. They are only made in the upright shape, and are in three sizes—one with opening 3 by 2 for F.P.K. or C. de V. prints, one for quarter-plate prints with an opening $3\frac{3}{4}$ by $2\frac{1}{4}$, and the third with a circular opening 2 $\frac{1}{2}$ in. in diameter. The Linette calendars are similar in style, but instead of the inscription a little calendar for the year is attached to the front of the mount.

There are plenty of other designs for those who want them, and both those who mount their prints and those who simply slip them in will find their wants catered for. Those who believe in "supporting home industries" will note with satisfaction that these cards are all "British made" at Messrs. Butcher's own works; but this, although an additional recommendation, is one of which they do not stand in need, as they can hold their own both in quality and price with any in the market.

The Kinora Camera and Machines.

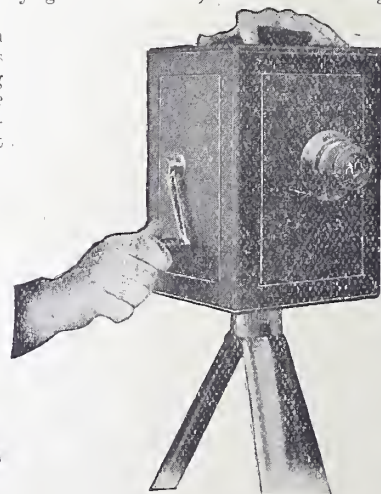
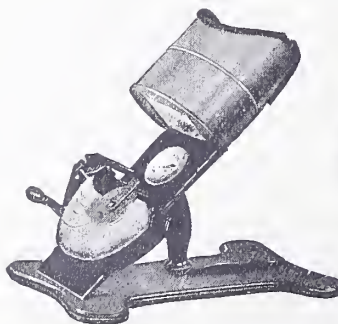
HERETO animated photography has remained to a very large extent in the hands of the expert, who has found his profit in it as an entertainment. The amateur, in spite of apparatus designed expressly to meet his requirements, has left it alone, partly, no doubt, from the elaborate character of the projection lantern required, and partly from the costly nature both of the appliances and of the film. The Kinora Co., Ltd., of 21, Red Lion Square, London, W.C., has set out to remove these objections, and is making a very bold bid for the amateur photographer's custom.

The apparatus for viewing the pictures is known as the "Kinora," and is constructed in several models, one of which is represented in the illustration which we print herewith. It is very simple in design—extraordinarily simple when the results which can be obtained with it are considered. The little prints are each mounted on the end of a strip of paper, and these strips are put up in a holder like the spokes of a wheel, only in this case the wheel may contain upwards of 500 of these spokes. The cylinder so formed is slipped on to the spindle of the apparatus, and the handle at the side, which can be clearly seen in the illustration, is slowly turned. The pictures are then brought up in front of the eye, one after another, much as the leaves of a book are quickly turned over with the finger and thumb, and the result is that the photographs are seen with the various objects moving, just as in a kinematograph.

The effect is very realistic. We have seen a great many pictures in the apparatus, and in all the suggestion of movement was very natural and perfect, and could be seen with

every comfort. The correct rate at which to turn the handle is found at once, and when this is observed there is none of that jerkiness often seen in animated pictures. One set of pictures can be changed for another in a moment, each set being carried compactly in a circular cardboard box. Any ordinary illumination, daylight or artificial, suffices for seeing them.

The Kinora camera is a taking apparatus designed for producing the pictures for the Kinora. It is a simplified and compact



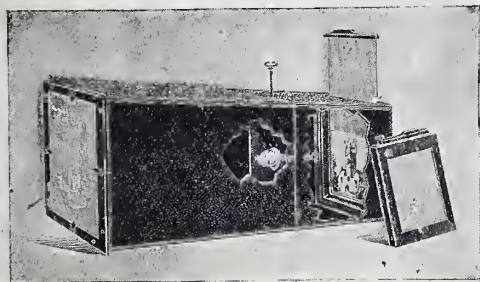
form of kinematograph apparatus, well finished in leather-covered mahogany, with a dial for registering the length of film exposed. It takes standard size films in film

boxes which can be loaded into the camera in daylight, the film being wound off after exposure into the empty box. The camera is very light and portable, and seems to be admirably fitted for the work it has to perform. In the ordinary course it is supplied with a Ross Homocentric lens of 3in. focus, working at $f/4.8$, but other makes can be supplied.

The idea of the company is to provide the taking and viewing apparatus, and to undertake the developing of the negative film and the production and mounting of the little prints, which can then be seen in the viewing apparatus.

The Klito Daylight Reducer.

NO one who sees a large collection of lantern slides of the average quality, such for example as are sent into society competitions, can fail to note how very many of them suffer from being made by contact instead of by reduction. It is not so much that contact slides are markedly inferior in quality to those made in the camera, but rather that in making them by contact the



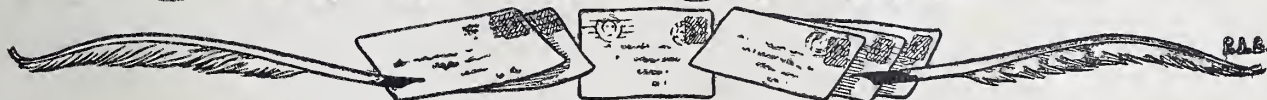
prevented with very little more trouble, by making use of a fixed focus reducer, such as the Klito, which is shown in the illustration herewith.

The Klito Daylight Reducer, which is made by Messrs. Houghtons, Ltd., of 88-89, High Holborn, London, W.C., is substantially made of wood, covered with leather cloth, and provided with a separate dark slide, so that the whole apparatus has not to be carried into the dark room every time a plate has to be inserted into it. The present pattern is the old one remodelled, and is provided with a rotating movement, by which lines which are not horizontal in the original negative can be made so in the slide. It does its work well, and certainly simplifies slide-making by reduction to a great degree. Although called a "daylight" reducer, and made primarily for use with daylight, it must not be supposed that it cannot be used with artificial light. Magnesium ribbon answers excellently, if suitable means are provided to diffuse the light before it reaches the negative, and incandescent gas, or even an oil lamp can be used. Our own preference for work with apparatus of this character, however, is for magnesium ribbon, exposed behind two screens of tissue paper enclosed between glass, separated from each other and from the negative by at least an inch. It is even, in some respects, preferable to daylight, as by measuring the length of ribbon burnt, the adjusting of the exposure can be done to a nicety.

The Klito reducers are made in three sizes, reducing from quarter-plate, 5×4 , and half-plate respectively to lantern slide size, and costing 12s. 6d., 13s. 6d., and 15s.

photographer generally has to abandon any ideas of pictorial composition which he may have had when he exposed the negative, and simply get what he can upon the slide. Hence, we often see the principal object with its edges going so close up to the margins of the slide, that the only thought it provokes is a wonder at its "tight fit." All this can be

CORRESPONDENCE



The Editor is not responsible for the opinions of his correspondents

TWO OR FOUR PHOTOGRAPHS ON ONE PLATE.

Sir,—I read with interest the article on this subject, by Mr. Ernest Spencer. I have been using his method for some time, and can safely say that after trying various other and more expensive methods, I have pinned my faith to this one. It is by far the cheapest, and is so simple, that it cannot get out of order.

There is one suggestion I should like to make to those who are thinking of making this simple little apparatus, and that is with regard to the cardboard. If the card is too thick the reversing back will not fit properly, and with a camera fitted with spring clips for holding the reversing back in position the suggestion of Mr. Spencer, viz., slackening off the screws, does not have the desired effect. Then, again, very thin card is likely to bulge or crumple, and allow the light to affect more than half the plate.

I myself use an old ferrotype plate, cut to the shapes Mr. Spencer gives, and I find it works admirably. The plates being very thin do not affect the fitting of the reversing back in the least, and, being metal, remain quite flat in any position, thus giving a clean edge to each picture. I need hardly say that the plate must be given a coat of dull black varnish, as the brilliant polish on the plate would reflect the light, and probably cause fog.

Those who do not already know a good dull black varnish or paint may be glad to hear that one can be made by grinding some ivory black in turpentine, and adding enough good

size to give it body. The metal is thoroughly cleaned, and the mixture applied with a soft brush. If the ingredients are mixed in due proportions a dull optical black will be the result.
Yours, etc., JOSEPH NIBB.

BROMIDE AND GASLIGHT PRINTING.

Sir,—If you will permit us we should like to emphasise the remarks in your editorial columns (*Photography* November 24th, 1908) as to the importance of correct exposure in bromide and gaslight printing. You, sir, would deem it incredible that we are always writing letters, sometimes three or four per day, to professional photographers to explain causes of failures which are solely due to over-exposure and under-development.

In addition to the defects mentioned by you, we have found that over-exposure and short development give mealy, grainy prints, owing to the uneven reduction consequent upon the short development. Users of Criterion Nonstress gaslight and bromide papers are the more likely to fall into this error, as, on account of the specially hardened emulsion (to give the "Nonstress" quality), it takes a little longer for the developer to begin its work. Hence there is a temptation to over-expose to hasten development.

We would repeat your warning to your readers, "If the print goes black quickly in the developer don't shorten development, but shorten exposure."
Yours, etc.,

THE BIRMINGHAM PHOTOGRAPHIC CO., LTD.



Silhouette Designs for Christmas Cards.

Written and Illustrated by E. W. Jackson.

Special to "Photography and Focus."

WHILE we do not for a moment depreciate the use of ready made commercial Christmas cards, some of which are really very elegant and tasteful, it cannot truthfully be said that such cards carry with them the personal interest which attaches to home-made photographic ones. There can surely be no form of Christmas card so interesting as that which is largely, if not entirely, the work of the sender.

But if our card is to have this personal charm, we must endeavour to treat its theme in such a manner that our own task and individuality is revealed as much as possible, and if we can exploit some phase of photography which is a departure from "the usual thing" the further charm of novelty will be added. It is no doubt difficult to hit on any new method of making photographic Christmas cards, but photography is so wide in its scope there should always be new fields to be explored to those of ingenious and artistic turn of mind.

The decorative silhouette photograph, for instance, has not been used to anything like the extent that it might be. For Christmas card work it is generally allowed that arrangements which are decorative in effect are found to give the happiest results, and the lack of this decorative quality is one of the weakest points of the average card. Silhouette photographs are not at all difficult to make, and no exceptional outlay in the matter of special apparatus is involved.

The daylight method described below is perhaps the best. First, then, an old packing case, such as an empty sugar box, must be procured, and the top and bottom of it knocked out. The box is then laid on its side



on a table near a window, so as to get a good amount of strong and even light. A piece of white tissue paper is tacked over the end of the box nearest the window, the camera being placed at the opposite end. The apparatus is then complete and ready for use. A window facing north is preferable, but if the sun does not actually shine on the tissue paper screen this is not essential. The objects to be photographed are best placed, usually, about half-way inside the box. If the silhouette pictures are to be absolutely black with a white background, no direct light from the front must fall on the objects forming the composition, and to ensure this fully an opaque cloth should be arranged to extend from the box to the front part of the camera, preventing any light entering the lens which does not first come through the tissue paper screen. A few touches of grey, however, if such appear, need not be considered altogether a disadvantage, as they tend to relieve the effect of too much solid black.

Any make of slow plate will be suitable for this class of photography, and it will be decidedly preferable to use a backed plate, otherwise sharp, clear outlines cannot be obtained. The correct exposure will, of course, vary with the time of the year, but as a guide to those making a first attempt we may say that the examples of silhouette photographs here shown received half a minute exposure on a bright day in September, the plates used being Ilford ordinary, with the lens stopped down to $f/32$. The developer used was the pyro-ammonia formula. Development, it may be pointed out, must be continued till the background is very nearly opaque, the flowers or whatever objects we may be photographing remaining almost clear glass.

As regards choice of subjects for this class of photograph, simple forms are to be preferred. A few ivy leaves, fern fronds, grasses, or simple flowers being enough to form a *motif* for a decorative study.

Having made our silhouette photographs, we have next to consider how we can turn them to the best account. We may use them as originally made in combination with lettering (mottoes) drawn directly on the photograph, or the decorative effect may be increased by using masks or discs when printing a subsequent exposure, the use of a piece of clear glass as a support for the paper being all that is necessary in this respect.

When we come to the combination of decorative silhouette photographs with landscape or seascape pictures there is practically no limit to the designs which may be evolved. Very pretty effects are obtained by combining prints of two colours. The silhouette background will usually be most effective if printed in black (gaslight paper developed with



amidol, for instance), but the inserted picture may be printed on self-toning paper, the warm sepia shade contrasting very pleasantly with the cold tone of the background. Naturally, snow scenes are preferably printed in black and white, as any trace of yellowness in a snow photograph is incongruous.

The illustrations of this article may be taken as examples of what can be done in the way of utilising these silhouettes for Christmas cards, and may serve as suggestions. But they by no means exhaust the possibilities of the method, variations of which are sure to occur to any photographer who puts the method to the test. Flower subjects and leaves have been employed in these cases, but the photographer will soon find that he is not limited to these natural objects, although their graceful outlines make them the first to occur to anyone seeking materials for the work. These are things, however, which must be left to the good taste of the amateur worker who is making the cards.

A third illustration to this article will be found on page 610.

Christmas Cards.

By Herbert J. Smith.

SOME SEASONABLE HINTS.

Special to "Photography and Focus."

ANY amateur photographers would be glad to print "Christmas Wishes" on their photographic cards, if only they knew how to do it; yet this is just one of those things which the more prominent writers on photographic topics do not think worth describing. The method is simplicity itself. Perhaps that is why it is passed over in silence.

In most cases it is best to print whatever inscription is required in white letters, and one of the easiest ways of doing this is the following: Some old celluloid film is obtained, and the gelatine coating is cleaned off it with water and washing soda. Hot water must not be used, as it cockles the film. When quite clean, one side of the film is roughened with some very fine emery powder, and it will then be found that it can be written upon without the ink running. If the amateur is a neat writer, he will be able to inscribe any words he may require on the film in this way; but a great many will find it easier to find a suitable inscription in print somewhere, to place the film down upon it, and to trace over the letters. A fine mapping pen should be employed.

The celluloid film bearing the motto is next fastened in position on the negative with a piece of stamp paper, the writing being next the film of the negative. The Christmas

card can then be printed in the usual way, and the lettering will show up plainly upon it in white. It is advisable to use Indian ink for writing on the film, as this will be found



Celluloid Films with Inscriptions for Christmas Cards

to dry very much blacker than ordinary writing fluid. The edge of the film may sometimes show in the finished print, but this can generally be avoided by trimming the film so that the edge of the celluloid follows some lines in the picture, such as the side of a road, the top of a wall, or some similar detail.

With some subjects, such as snow scenes for example, the lettering has to appear darker than the rest of the picture. This is rather more troublesome, but does not present any great difficulties. To do it, we proceed to write the wording on a smooth sheet of white paper; or if this is beyond the ability of the photographer he can get his stationer to have it printed. This is then photographed in a good light, and so gives us an opaque negative, with the words transparent. The picture is printed in the usual way, and the print is then placed under the negative of the lettering, which is then in its turn printed. The words soon appear clearly in dark lettering, while the rest of the print is protected by the black negative.

These methods do not injure the negative in any way, but with a minimum of trouble and expense turn the plain photograph into an attractive Christmas card.

Imperial Plates

ORTHO S.S. ORTHO S.R.

H. & D. SPEED 275.

H. & D. SPEED 200.

ORTHO N.F.

H. & D. SPEED 175.

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Autumnal Tints.

Imperial P.O.P

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AND DELICACY OF TONES.

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Telegrams: "Cyclist, London." Telephone: 5610
and 5611, H. Iborn.

PUBLISHING DATE.—**PHOTOGRAPHY AND FOCUS** is sold throughout the United Kingdom every Tuesday morning.

SUBSCRIPTION.—**PHOTOGRAPHY AND FOCUS** will be forwarded regularly at the following rates:
GREAT BRITAIN. ABROAD.

	s. d.		s. d.
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REMITTANCES.—Postal Orders, Cheques, etc., should be crossed and made payable to **ILIFFE AND SONS LIMITED**.

ADVERTISEMENTS.—All communications on advertisement matters should be addressed: The Advertisement Manager, **PHOTOGRAPHY AND FOCUS**, 20, Tudor Street, London, E.C. All copy for displayed advertisements for the issue of any particular week must reach Tudor Street by the first post on Monday morning in the week previous.

PREPAID ADVERTISEMENTS.

SALE AND EXCHANGE (for Amateurs only).—1d. per word, minimum 9d.
PROFESSIONAL AND TRADE.—Three words 2d., minimum 1/-.

All advertisements to be inserted on these terms must be accompanied with remittance. To ensure insertion, letters should be posted in time to reach the offices, 20, Tudor Street, E.C., not later than first post on Wednesday.

BOX NUMBERS.—For the convenience of advertisers, letters may be addressed to numbers at the office of the paper. When this is desired, 2d. will be charged for registration, and three stamped and addressed envelopes must be sent for forwarding replies. Only the number will appear in the advertisement. Replies should be addressed: "No. 000, c/o **PHOTOGRAPHY AND FOCUS**, 20, Tudor Street, London, E.C."

DEPOSIT SYSTEM.—Persons who hesitate to send money to unknown persons may deal in perfect safety by availing themselves of our Deposit System. If the money be deposited with **PHOTOGRAPHY AND FOCUS**, both parties are advised of this receipt, and upon intimation of the arrival and acceptance of the goods, the money is forwarded, less a charge of 1/- for registration. The time allowed for a decision after receipt of the goods is three days. For all transactions exceeding £10 in value, a deposit fee of 2/6 is charged. Cheques and Money Orders should be made payable to the Proprietors, **Messrs. ILIFFE AND SONS LIMITED**, and addressed to them at Coventry.

PUBLISHING NOTICE.—Communications for the Publishers should be addressed: **ILIFFE AND SONS LIMITED**, 20, Tudor Street, London, E.C.

EDITORIAL NOTICES.

ADDRESS.—All communications for the Editor should be addressed: The Editor, **PHOTOGRAPHY AND FOCUS**, 20, Tudor Street, London, E.C.

TO CONTRIBUTORS.—The Editor will be glad to consider original up-to-date manuscripts on photographic subjects. All contributions must be typewritten, or in very legible handwriting, on one side of the paper only, and should bear the name and address of the sender. Letters or communications arising out of matters already appearing in the paper are not paid for. The Editor disclaims legal responsibility for the safety of matter submitted to him, but he will endeavour to return rejected manuscripts, etc., when a stamped addressed envelope is enclosed for that purpose. No notice whatever can be paid to communications without it the name and address of the sender, not necessarily for publication.

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PRINTS FOR REPRODUCTION.—Reproduction fees are only paid by arrangement beforehand. The sending of a print, without any condition stated, will be taken as permission to reproduce it without fee. The Editor will be glad to consider for publication, with or without letterpress, photographs of special interest, on terms to be arranged.

PAYMENTS.—Articles and illustrations are paid for on acceptance.

INTERVIEWS.—The Editor will be at 20, Tudor Street, on Wednesdays, between the hours of 9.30 and 11.30 a.m., but can only be seen at other times by appointment.



THE CITY SALE AND EXCHANGE, of 54, Lime Street, London, E.C., has issued a comprehensive list of second-hand photographic and lantern apparatus, which will be forwarded to any applicant post free.

THE NORTH MIDDLESEX Photographic Society holds its members' exhibition at Hanley Hall, Sparsholt Road, Crouch Hill, London, N., on December 3rd, 4th, and 5th. There will be a lantern display on each of those evenings.

PHOTOGRAPHIC CHRISTMAS CARDS may be divided into two classes, said Mr. E. G. Collins, at the Birmingham Photographic Society. The first consists of suitable prints simply mounted on a tinted paper or cardboard support, the greeting being printed or written by hand. The second class includes all those cards which are made entirely by photography, and consist of a photograph of a design or a combination of a photograph and a greeting. To the artistic photo-

grapher the second class opens out a field of work of unlimited possibilities. When once a satisfactory design is obtained, all that has to be done is to make a negative to print off, by any process preferred, the number required. In making the negative a great saving of time is effected by making a rough copying stand, with runners on which an easel or support for the design moves to and from the camera, which is fixed. It is important to notice that the lines are kept absolutely true and square, and the design should be ruled off to a size bearing a relative proportion to the size of printing paper to be used. Having focussed the design at full aperture, it is better to stop down a little to secure better definition all over. As regards the plate to be used the best is one of medium speed, or an isochromatic one, and it should be backed to get the line work clear. Hydroquinone or pyro-soda is the best developer, as either gives good density. Printing is best done on thick ordinary cream bromide or on a gaslight paper. If a folded card is desired, the smallest camera that can be used with success is a half-plate. It can, however, be done without by making two quarter-plate negatives—one for the picture and one for the greeting. Care will have to be taken to mask the junction of the two while printing. For printing the greeting on cards of the first class, if the tinted mount is of a light colour, we may use ordinary or Indian ink; or, if a softer effect is needed, Prout's brown. For all dark mounts nothing is better than Chinese white. It is mixed with water to a fairly thick consistence, and put on with a soft easy running pen. A quarter-plate negative may be printed on to a half-plate paper, by masking the whole of the paper except where the print is to be. The greeting may then be written with ink in the usual way.

HINTS ABOUT ENLARGED NEGATIVES

At the Worthing Camera Club the following method of backing a negative evenly with tracing paper was recommended. The tracing paper is put between wet blotting paper, and is then taken out and laid on the glass side of the negative. About an eighth of an inch is folded back all round, and an adhesive is applied to these edges, after which they are folded down on to the glass again, and gently rolled into contact with a squeegee. The contraction on drying causes the paper to become quite smooth, and there is no fear of the film side getting wet. When varnishing a negative a line should be scraped through the film, right down to the glass, all round, near the edges of the plate. The varnish, when poured on and flowed over the surface, when it comes to the line will reach the glass. This is an effectual preventive of damp reaching the film from the edges of the plate.

THE RAJAR CAMERA for October was awarded by Messrs. Rajar, Ltd., to Mrs. M. Hoppe, 8, Margravine Gardens, Barons Court, London, W., her print having been judged the best sent in during that month.

Books for Photographers. .

Science and Practice of Photography.

By CHAPMAN JONES, F.I.C., F.C.A., F.R.P.S.
Price 5/- net. Post free 5/4.

Instruction in Photography.

By SIR WILLIAM ABNEY, K.C.B.
Price 7/6 net. Post free 7/10.

Practical Orthochromatic Photography.

By ARTHUR PAYNE, F.C.S.
Price 1/- net. Post free 1/2.

Successful Negative Making.

(Illustrated.) By T. THORNE BAKER, F.C.S., F.R.P.S.
Price 6d. net. Post free 7d.

All About Enlarging.

(Illustrated.) By C. WINTHORPE SOMERVILLE, F.R.P.S.
Price 6d. net. Post free 7d.

Photography Made Easy.

(Illustrated.) By QUI-VIVE.
Price 6d. net. Post free 7d.

Lantern-slide Making and Exhibiting.

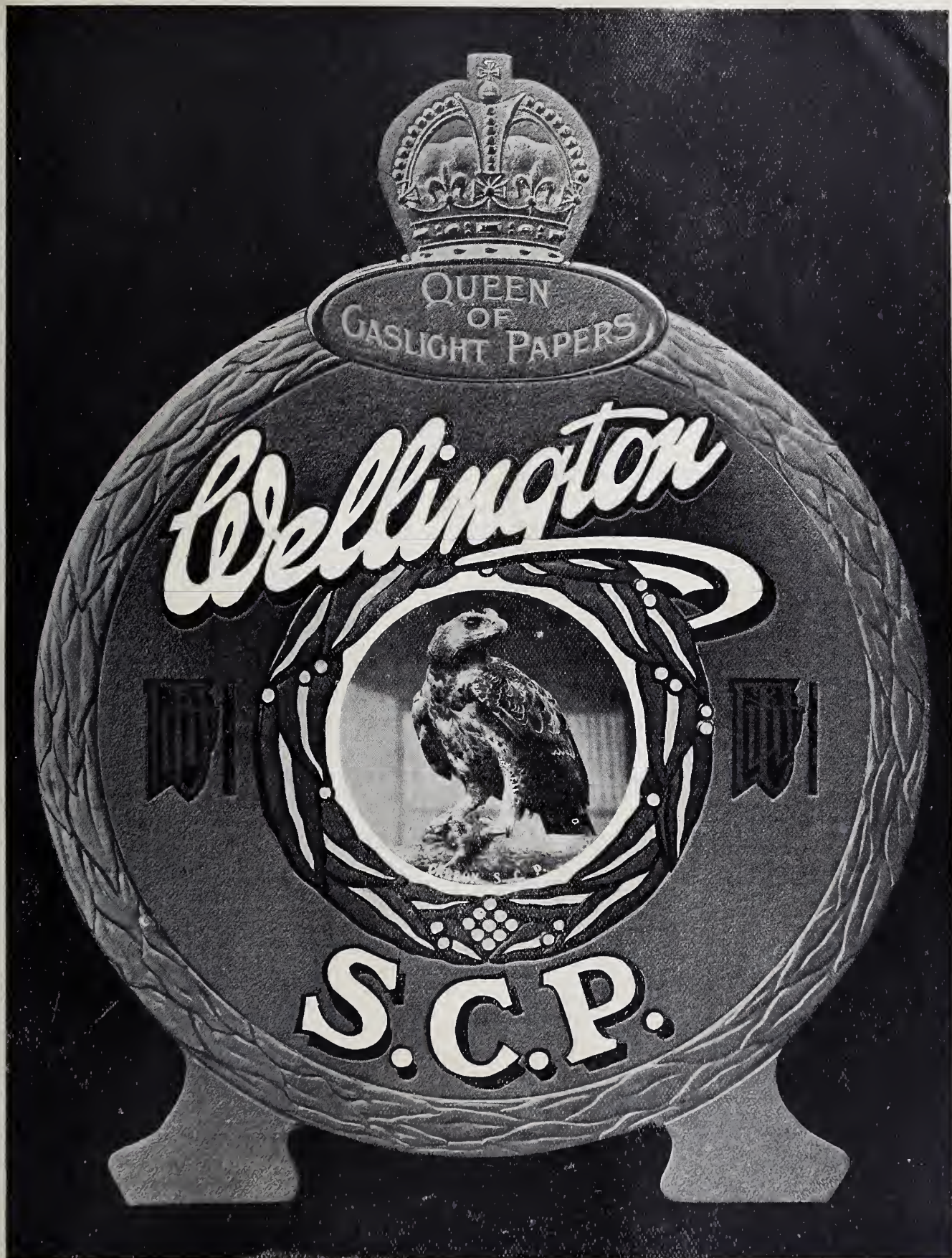
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Price 6d. net. Post free 7d.

Pictorial Landscape Photography.

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Descriptive Booklet, dealing with the manipulation of the "WELLINGTON" S.C.P., gratis on application to
WELLINGTON & WARD, Elstree, Herts.

MESSRS. GAMAG, LTD., have received the Royal Warrant of Appointment to His Majesty the King of Spain.

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THE MIDLAND PHOTOGRAPHIC FEDERATION has issued a "Year Book and Gazetteer" for 1907-8. Copies can be obtained from the honorary secretary, Mr. Lewis Lloyd, of the Hollies, Church Road, Moseley, price 1s. 1d.; members of federated societies can purchase it for 6d. The Gazetteer is an exceptionally well compiled one, and should be very useful to all photographers in the Midlands, whether they belong to the Federation or not.

× × × ×

THE SIDCUP CAMERA CLUB, which was just being formed, is a photographic section of the Sidcup Literary and Scientific Society. Mr. H. B. Hale, of Gresham Lodge, Sidcup, is the honorary secretary, and will be glad to furnish full particulars. The first meeting will be held at the Sidcup Public Hall, on December 4th, at 8 p.m., when Mr. F. C. Starnes will lecture on development.

THE WOE OF THE LANTERNIST.

UNSPOTTED slides are bad enough, but slides that are incorrectly spotted are fifty times worse. We print below a letter we have received on this topic, and can bear out what "Operator" says, from our own experiences:

"Sir," he writes, "I beg to draw your attention to the carelessness of many lantern slide makers in spotting the slides entrusted to them. I am continually called up to exhibit slides for scientific societies, and I make a great number of slides myself. I always ask which way the picture is to appear, if my ignorance on scientific matters prevents me from knowing the right way of viewing the slides.

"The slides chiefly at fault are scien-

tific ones, subjects that the slide maker cannot always be expected to understand. In such cases why does he not gather the information from the man for whom he is working? No! he guesses the way of showing the slides. Consequently, they are frequently put into the carrier the wrong way of the slide, but the correct way according to the spots.

"Yours faithfully,
"OPERATOR."

CLEANGLAZE.

THE compound known as "Clean-glaze" is made by the Clean-glaze Mfg. Co., of 253, Bath Road, Hounslow, W., and is sold by dealers and chemists in 1s. tubes. If any of our readers have a difficulty in getting it, a tube will be sent by the makers post free for 1s. 1d.

The purpose of the preparation is suggested by its name. It is intended to brighten and clean up glossy photographic prints, for which it is certainly most efficacious. A very little of the paste is squeezed out of the tube and is rubbed over the surface of the dry print with a little ball of cotton wool or rag. The print is then given a polish with a soft cloth. "Clean-glaze" we found to be a most effectual remover of stress marks on glossy papers, and to brighten up negatives as well as prints. No doubt many an amateur will be glad to avail himself of this handy and efficient preparation, which is also an economical one, the shilling tube holding, it is said, enough of the paste to clean up six hundred prints postcard size, or their equivalent.

ILFORD, LTD.

THE report of Ilford, Ltd., for the year ended Oct. 31st, 1908, shows that after making allowance for depreciation and provision for doubtful debts, the nett profit for the year is

£28,810 11s. 9d. With £1,838 1s. 6d. brought forward from last year this gives £30,648 13s. 3d. available for distribution.

The directors have just paid dividend on the six per cent. preference shares amounting to £11,400, leaving a balance of £19,248 13s. 3d. From this balance they recommend that £6,000 be written off goodwill, £2,000 be written off investments, and that a four per cent. dividend be paid on the ordinary share capital. This will absorb £7,600, leaving £3,648 13s. 3d. to be carried forward.

The twelfth ordinary general meeting will be held at Winchester House, Old Broad Street, London, E.C., on Tuesday, December 1st, at 12 noon.

PHOTO-FANS.

A DECIDED novelty comes to hand from Jonathan Fallowfield, 146, Charing Cross Road, London, W., in the form of what he terms "Photo-fans."

These are small silk fans in a variety of shapes, each provided with a space $3\frac{1}{2}$ in. by $2\frac{1}{2}$ in. on which a photograph may be mounted. The rest of the fan is decorated with a hand-painted design in colour.

The fans which have been imported from Japan, are really most effective little things, and can be applied to quite a number of uses. Amongst others, they may not only serve as fans, but as menus, candle shades for pianos, programmes, etc. They are also very reasonable in price, retailing at 6d. each, 5s. 6d. per dozen, or 60s. per gross.



QUERIES AND REPLIES

REGULATIONS.—(1) Envelopes must be marked "Query," and the "Enquiry Coupon" found elsewhere must be enclosed. (2) The full name and address in addition to a *nom-de-plume* must be given. (3) Only one question on one subject is allowed in each letter. (4) Prints may be sent for criticism, but a separate coupon must be sent with each print, and a stamped addressed envelope (not loose stamps) for their return.



Queries are dealt with in strict rotation in the order received. Only "Urgent Apparatus" queries will be dealt with by post, for which purpose a stamped envelope must be enclosed.

TINT (Bath).—We have returned your pictures. The work is done with aniline dyes and a brush, by hand.

"A BEGINNER" (Worcester).—You sent no name or address and 1d. excess postage had to be paid on your letter. If you want a reply you must try again.

VIKING (South Hampstead).—If your friend paid for the photographs in the ordinary way she can give you permission to make copies, and the photographer cannot interfere.

A. W. GILL (Truro).—The whole combination would, presumably, be better, since it works at a larger aperture and so reduces exposure; but if you think the perspective requires it then the back combination may be used. Approximately four times the exposure will be necessary.

S. H. SAUNDERS, JUN. (Kingston-on-Thames).—We can add nothing to what is stated in the articles.

C.D. (Hanley).—It looks to us like insufficient development; try developing for twice as long, and if it is no better send us a negative to look at.

ALEX (Coleraine).—No list in our possession gives what you want. You might try Walter Tyler and Co., Ltd., Waterloo Road, London, S.E., and Newton and Co., No. 1, Fleet Street, E.C.

JE CHERCHE (Highgate) wishes to know where he can purchase upright cloud negatives. He has been to many shops, but all of them had horizontal ones only. Perhaps some reader can enlighten him.

WARNING.



Amateur Photographers are advised to exercise the greatest caution when purchasing second-hand Goerz Lenses, or lenses purporting to be such, from others than Dealers of repute, as Rapid Rectilinear Lenses of little value are being, by some unscrupulous persons, engraved and sold as Goerz Lenses. These

SPURIOUS GOERZ LENSES

are very clumsy imitations and seem at present to be confined to Glasgow, but as the rogues concerned may improve in their art of fraud and extend their field of operations, photographers all over the country are earnestly warned against them, and requested, should they come across such lenses, to at once send them to the undersigned.

G. P. GOERZ OPTICAL WORKS, LIMITED,

1--6 Holborn Circus,

London, E.C.

FOG-GED (Louth).—The Aldis should answer your purpose perfectly.

C.B.A. (Shortlands).—None that we know of. The nearest is the information given in *Photography* for June 4th, 1907, page 442-470.

ACHURCH St. Neots).—Your letter has been handed over to our advertisement department for attention. We cannot understand the silence of the firm you name.

MISS D. AITKEN (Fife).—Clearly you did not use enough magnesium. A yard at least we should expect to be required; more if the lens is a slow one, or the magnesium has to be more than four or five feet away.

B. K. TANDAU (Lucknow, India).—Why should you not compete? Readers in India, Australia, and China are amongst our regular competitors; and nearly all our competitions are announced several months ahead; while the advanced and beginners' competitions are regular ones.

ANXIOUS ONE (Shettleston).—It is hard to realise that the harshness is due to the lens, and therefore before advising should like to see prints showing the defect of which you complain. Will you send us some, repeating your enquiry with them, and we will do what we can to help?

R. HAWKINS (Montreux).—If you slit the ends, and wrote "photographs only," it might perhaps do; but the criticism would, we expect, cause it to be charged as a letter. At least two regular competitors enclose an envelope with 2d. on it for criticism only, and ask for the prints to be destroyed.

T. BIRD (Cleethorpes).—It is an American make, sold in this country by Kodak, Ltd. There is no need to get the supplementary lenses. We cannot see that they would be of any service at all with such an instrument. Articles on their action were published in *Photography* for February 12th, 19th, and March 5th, 1907.

PITMAN READER (Castle Eden).—Dissolve one ounce of alum in a pint of hot water, and let it get cold. Dissolve five ounces of hypo in a pint of hot water, and when this has gone cold add an ounce of the alum solution. Place the prints straight into this without washing. We should not use the above quantity for more than two dozen quarter-plate pieces, or the equivalent.

SKENEDHU (Eastbourne).—It is not possible to use both negatives at once; but by exposing the same piece of bromide paper first on the landscapes and then on the cloud, shading the one while exposing the other, it can be done. The method has been described in detail more than once in our hack numbers, and a little search should certainly give it you. We cannot put our hands on it at the moment.

E. HAWKES (Leeds).—Professors Lowell and Lampland, Flagstaff, Arizona, exhibited at the R.P.S. exhibition in 1907 (and were awarded a medal for) photographs of Mars. The official catalogue states "Several of the canals are distinctly visible on the photographs, and one has been photographed double." Plenty of references to this work are to be found in the scientific journals of last year.

H. BREACH (Chelmsford).—It is not at all a good backing, and we can only suggest that you use less water with the sienna, if you want it to dry more quickly. A much better one would be made of equal parts of strong gum arabic solution, caramel and burnt sienna. Only the thinnest smear need be put on. Backing is one of those things which are much better bought ready made; as much of the caramel on the market is not suitable for this particular purpose.

A. O. DODD (South Croydon).—A retouching medium may be made by putting the following ingredients in a bottle and shaking until all is dissolved:

Resin	...	...	...	...	...	300 grains
Gum dammar	...	...	...	...	...	70 grains
Turpentine	...	...	...	...	...	4 ounces

But retouching medium is also one of those things which it pays to buy ready made.

NORTH. (Hexham).—The quarter-plate lens would be the better, we expect. Stopped down to f/16 it might be expected almost to cover the half-plate and would show much more of the building than the 8in. would do. We should use medium rapidity orthochromatic plates hacked. As far as exposure is concerned, experiment alone can help you; we should try an hour under the conditions named, and in development take great care not to overdevelop, so as to avoid halation as much as possible.

F. FIELD (Birmingham).—The whole of the prints sent in to the last advanced workers' competition that were accompanied by stamped wrappers or envelopes have been returned. We do not recollect one with the title you name. The lens is a good one, but the camera is of obsolete design, and unless at a very great reduction we certainly should not recommend its purchase. If you get both at the list price of the lens alone, and both are in good order, it might perhaps be worth buying. But it is seldom wise to buy a camera that is no longer made, and that is of such special design.

IGNOTES (Newbury).—The hyper-focal distance with the stop marked f/8 with the half lens is 102 feet. You would do well to make a scale by actual trial with the largest opening that will give good definition using a candle flame at night, as the image is rather dark. Chapter viii. of "The Hand Camera," by Westall and Bayley (price 1s. nett, or post free from our publishers 1s. 2d.), deals with focusing, and for telephotographic work Dallmeyer's "Telephotography" (price 15s. nett, or post free from our publishers 15s. 6d.) is the classic. Alas! We have the trouble you name to a very great extent; many—the majority in fact—have to be completely re-written, and often involve copious correspondence to clear up doubtful points.

ANAS (Wimbledon Park).—The Zeiss Double Protar.

LENS (Glasgow).—You will be quite safe if you rely on the marking implicitly.

W. H. PRATT (Nottingham).—The copyright remains your own; and you are quite at liberty to do what you like with the subject.

HOPEFUL (Brunswick Square).—No; we should not expect there would be any perceptible difference in the general quality of the work.

W. BARBER (South Norwood).—There has been a little delay in the delivery of the medals, but we hope to get them all off in a few days now.

MISS E. SCOTT ANDERSON (Ealing).—The honorary secretary of the Ealing Photographic Society is Mr. Sydney Taylor, of 38, Hamilton Road, Ealing.

REV. N. R. FITZGERALD (Savernake).—See page 594 last week, and rules at the top of the previous page. We are sorry, but we cannot reply to enquiries by post.

J. C. BROWN (Cleckheaton).—It can hardly be too near, provided there is no risk of contact. The further the negative is from the condenser the larger must be the condenser to illuminate it properly.

DISAPPOINTED (Taunton) asks if winning a prize in the title competition renders the competitor ineligible in the beginners' competition. A.—Certainly not; to be ineligible the award must have been gained for a photograph.

AUTOCHROME (Joppa).—Messrs. Sanger Shepherd and Co., of Gray's Inn Passage, Red Lion Street, London, W.C., supply all the materials; but we are not sure about the "Fitch" soluble gelatine. You would do well to write them.

PHONO (Glasgow).—If you are quite sure it is not in any way due to light leaking in at the shutter it is flare, and can only be got rid of by getting a fresh lens, which the makers should be very willing to provide. It certainly looks like flare.

"B. GINNER" (Gourock).—The only way is to use orthochromatic plates and a medium depth of screen (six times should do). Then if the exposure is not too great and the development is correct you will get the clouds and the landscape, both with printing value.

ENLARGER (Dewsbury).—There are so many excellent makes that we could not select one in preference to another. Any of the firms advertising enlargers in our columns will send you price lists from which you can select what will best suit your purse and requirements.

P.T. (Soho).—Your query has come to hand; but we are sorry to say we cannot help you. We do not understand the conditions. Cannot you find out the size of the background by hanging up a newspaper behind the subject and seeing how much of it comes on the plate?

BALBUS (Rathkale).—It is allowable to sell prints from the same negative to different papers. You appear to have been unfortunate, and if you value the prints you had better inform the recipient that unless they are returned or their value re-estimated legal proceedings will be taken.

DUTCHMAN (Hammersmith).—The developer you are using is not a suitable one. You had best use

Metal	...	...	...	...	...	10 grains
Hydrokinone	...	...	...	...	...	30 grains
Sodium sulphite	...	...	...	...	...	350 grains
Sodium carbonate	...	...	...	...	...	350 grains
Potassium bromide	...	...	...	...	...	3 grains
Water	...	...	...	...	...	10 ounces

RUSTICS (Warrington).—Formalin is a reliable hardening agent, but in no sense a substitute for varnish. Nor do we know any varnish that may be completely trusted to protect a plate from damp in printing. Your best plan will be to formalin the negatives first, and then to varnish. If you get a bottle of varnish and a couple of dozen waste negatives you should be able to varnish a plate perfectly before you get to number 24. It only requires a little knack.

BROMIDE (Bray).—The blisters certainly point to the sulphide solution being too strong, and what you have been told is quite correct. The formula is a good one; but we should advise you to get "Toning Bromide Prints," by Blake Smith, price 1s. nett, or post free from our publishers, price 1s. 2d. It gives a great deal of useful information on this and other methods. Possibly your sulphide solution is stale; in which case a washed out result may be obtained.

PERPLEXED (Seven Kings) writes: "In your report of the presidential address of Mr. J. F. Duthie on 'High Speed Work' in your current issue, it states that with a 5in. lens, etc., an exposure of 1-100th to 1-150th of a second will be ample, and with the single combination 1-200th to 1-250th would be required. I have, however, noticed in various instructions and articles, etc., as to exposures, that the single combination of a lens requires about four times the exposure of the double lens. Can you explain how the president of the 'E.P.S.' makes it to be one half the exposure of the double lens?" A.—Mr. Duthie was dealing with the exposure required by the subject, not by the plate, as is evident from the context. The single combination being about twice the focus of the entire lens, the distance which the image on the ground glass will move in a given time is about doubled by the use of the single lens. To get it sharp, therefore, the exposure must be halved. As the full aperture of the single lens will probably require four times the exposure required by the full aperture of the complete lens, it follows that to use the single combination and get as fully exposed plates as when using the complete lens, the light must be eight times as strong or the plates eight times as fast.

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Gives splendid permanent prints,
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pure clean high lights.

**Vigorous Velox for Weak
Negatives.**

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and

GRIFFINS,

Kingsway — London



"The time has come, the Walrus said, to talk of many things."

H OOROO! I foresee fun. There'll be hats in the air and wigs on the green before long in the photographic world. For, behold, the said photographic world is challenged by E. S. Donisthorpe. And serve it right.

* * *

E.S.D. challenges any amateur or professional photographer. I have half a mind to take him on myself, but I doubt if I come up to his specification. Some people say my work is too bad for an amateur; others say it is too good for a professional; others deny that I am a photographer at all. I agree with all of them.

* * *

Anyhow, Mr. Donisthorpe has produced, to his own evident delight, a luminous block for making bromide prints. There was quite a craze some years ago for articles coated with luminous paint, and one had to have pretty good nerves to walk about a house in the dark where such articles were kept. A luminous statue of Beelzebub on the landing was more striking than pleasant. It was a favourite dodge to have luminous matchboxes that you could find in the dark; at least, you could find them if you kept a good light going in the room for some time and then put it out. In the same way you have to offer Mr. Donisthorpe's block suitable encouragement before it will be properly luminous; but after exposure to daylight or the glare of burning magnesium, it will assume a most pleasing and corpse-like phosphorescence. All you have to do then is to put a negative down on a piece of bromide paper, place the Donisthorpe brick on it (hard), and hold it down for a minute or two. You then brush off the pulverised negative and develop the print. Mr. Donisthorpe offers to make bromide prints faster in this way than can any other photographer by any other method. Only my modesty and an unfortunate accident prevent my taking on E.S.D. myself. I guess he would want a cartload of his bricks to keep up with me when I got properly going.

* * *

The accident to which I have referred is the inopportune collapse of my dark room lamp. The thing has developed perforations of the oil reservoir. The genius who invented that lamp provided it with four feet, thus bringing it into the category of quadrupeds; but he arranged that the bottom of the oil reservoir should also rest on the table. He could not have been a photographer, or he would have known that the result would be that the said reservoir would be constantly submerged in the fearsome mixture of miscellaneous solutions that naturally flood the table of the careful amateur. The inevitable sequel would be rust and resultant perforations. Consequently, whenever I pour a pint of paraffin in my lamp two pints run out instantly. As a temporary makeshift I dropped some lumps of beeswax into the reservoir, and heated it till the lot melted, and made an even coating over the bottom. Incidentally, there was a shocking smell, and almost a conflagration, but the lamp held oil for a time. Then it didn't.

* * *

I am disappointed in that lamp. It has pained and grieved me. It has smelt vilely; it has smoked voluminously; it has overflowed; it has gone out suddenly and unexpectedly at critical moments; it has ignited and made a temporary conflagration in the scullery; it has fallen into the washing tank. Yet, on the whole I have loved and cherished it. I have relied confidently upon it. Now, after all these years, it has betrayed me with its honeycombed base.

* * *

It follows that I cannot accept the Donisthorpean challenge, for it has been with the feeble and variable light of that lamp that I have been in the habit of making bromide prints. Shut me up with a printing frame, a negative, three packets of paper, and that lamp, and in an hour I will

emerge covered with soot, but with six dozen prints in the fixing bath. And no luminous bricks used, mind you. Can Mr. D. work faster than that? I don't say I can't put on a bit more pace myself, but I think that six dozen prints an hour is about as fast as is consistent with careful and well-considered work. But now that my lamp has played me false I am helpless. Of course, I shall get another, but it will be another. No other lamp can ever replace that one in the dustbin. It was so ripe.

* * *

Although I do not suppose there is anyone else equally capable of taking the shine out of the Donisthorpe brick, I trust someone will accept the challenge. Whatever the result of the contest, it cannot but be productive of good, for it will act as a precedent. It will pave the way for other photographic challenges, and that is where I foresee fun. We may still live to see the pages of this paper adorned with lists giving the latest odds taken and offered for a whole host of coming photographic contests. Someone will challenge all comers for oiling up a print in the shortest time, and if it is the man I think it would be I guess he would weigh in with a brush that would do the trick complete in two dabs—one on the palette and one on the print. Another will look around for a competitor who can give a longer and drier lantern lecture than he can; and he will never find one in this world. Some other man will quote the number of plates he has exposed in his life, and bet that no one can beat it, as though there were any real merit in ruining good plates. And I know of one genius, when the challenges are flying around, who will wager Lombard Street to a china orange that no one else has written over 360,000 words of photographic piffle and had the honesty to call it such. That last clause would settle them. Otherwise the editor might win.

* * *

Long ago I suggested that photographic societies might infuse some much-needed spark of interest into their proceedings by organising contests at their meetings. But, like many another brilliant suggestion of mine, it has had but meagre results. Now is the time to act. Why not arrange a meeting between a one-armed amateur with a box of wax vestas and Mr. Donisthorpe with his luminous brick? the latter to be used strictly for printing purposes and not as a missile. Then there might be a competition for the ugliest self-portrait. This would surely be easy enough for anyone to have a shot at. Another competition with utilitarian results would be one for the detection, by taste only, of various poisonous photographic chemicals, the first finder of a fatal variety to be the winner. I only suggest these novel pastimes because I view with regret the growing tendency amongst photographers to devote their meetings to such frivolities as whist drives, dances, tripe suppers, and smoking concerts. I hail Mr. Donisthorpe as a daring pioneer of a new and more hopeful era—the era of photographic sport; and I only wish that in his brave challenge to the world he were armed with a more promising weapon than a phosphorescent brick.

THE WALRUS.

SUBSCRIPTIONS.

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PHOTOGRAPHY

A JOURNAL FOR EVERY CAMERA USER.

EDITED BY R. CHILD BAYLEY.

PUBLISHED WEEKLY.

DECEMBER 8TH, 1908. TUESDAY. No. 1,048. Vol. XXVI.

THE BOWLER.

BY J. BEAUMONT.

*Awarded the First Prize in the
Instantaneous Class in the Marion
Competition.*

In this remarkable bit of hand and camera work, the photographer has succeeded in getting the bowler in the most characteristic attitude of his delivery, and at the same time has caught the ball in its flight from his hand. Those who have attempted work of this class will know how far more difficult it is than those forms of instantaneous work where the actual instant of exposure is not important, such as in train photography. Another example of a similar kind, from the same competition, will be found on page 627 this week.





Bromide Printing.

As promised, bromide printing and the development of bromide paper provide the *pièce de résistance* of this issue of *Photography and Focus*, the issue a fortnight hence dealing with that extensive application of bromide paper, enlarging. Those who are anxious for "control" in their printing methods will find something very much to the point in Dr. Power's article on page 630, which we quote from the "American Annual of Photography." It is a great thing to have a control method which not only allows us almost unlimited power of modification, but also permits the photographer to see what he has done, and if he does not like it to restore his print to its original condition again.

Gaslight Fluctuations.

Now that we are giving so much space to photography by artificial light it is well not to lose sight of the uncertain character of the ordinary gas burner. "Ten seconds at a foot from a gas burner" may sound definite enough, but actually is a very loose description of the exposure. In small towns, as is well known, the quality of the gas supplied to customers varies greatly at times. In the big cities it seems more constant, probably from the much larger scale on which it is manufactured; but the pressure varies, not only from day to day, but from hour to hour. To secure uniformity in exposure is therefore a problem when dependence has to be placed on a gas flame. The pressure difficulty can be got over by the use of a burner which, however feeble the pressure, will "roar" when fully turned on. If then it is turned on until it roars, and then slowly turned down until the noise just ceases we shall get a flame which will be constant enough for such purposes as bromide printing. With incandescent gas the fluctuations are as great, or even greater. Where much printing is done it is a good plan to surround the glass chimney with two bands of ferrotype, covering the two ends of the mantle, and leaving only about an inch of the middle of it showing. The gas is then turned on until the incandescence of the mantle extends both

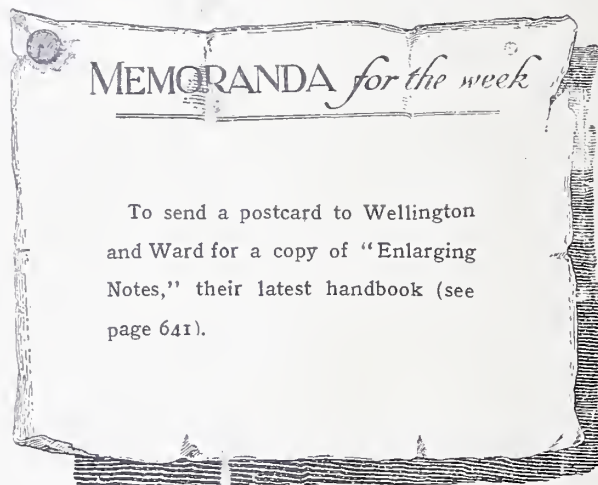
below and above the boundaries of the part by which the printing is done. In this case also we get a fairly constant light.

Electric Light.

It is only justice to the gas to note that electric light fluctuates as much, or even more. It is not so likely to cause trouble to the amateur photographer, as it is generally about the same at the same time of day, but in districts where there is a great demand for current for industrial purposes the voltage is distinctly lower during the day than it is at night, and a very slight drop in the voltage will make a big difference to the light. An old incandescent lamp also is less brilliant than a new one. These things may not give much trouble to those who are constantly working with artificial light, but it is best to point them out, lest too much reliance is placed upon the uniformity or constant character of a luminant that may be anything but reliable.

The Marlon Competition.

Most of our illustrations this week are selected from the winning prints in the big competition which Messrs. Marion and Co. have just brought to a most successful termination, and when due allowance has been made for the inevitable falling off in the reproduction they will serve to give some indication of the very high quality of much of the work sent in. Messrs. Marion tried the experiment of a scientific class, which was judged by Mr. Chapman Jones, and found that the entries sent in to it were of a most encouraging character. We are very glad to hear it, as the scientific photographer is usually one whom it is very hard to lure into a competition at all. He is generally interested primarily in his science, uses the camera simply as a means of making a record, and the petty triumphs and jealousies of the little world of pictorial photography pass by and leave him unmoved. A full list of the awards in all three classes, we are given to understand, will appear amongst the advertisements in this issue.



Curiosities of Criticism.

We suppose we shall be accused of running down the entire American photographic press if we call attention to the unconscious humour of one of the Transatlantic magazines, but we cannot help it. A journal that shall be nameless, which enjoys the services of four editors or associate editors, has been reviewing the Photographic Salon. We will not quote all it says about that exhibition, but it observes that Mr. Arbuthnot sends "examples of a new scheme of composition—an absolute invention." It goes on to say: "This composition seems to be a logical development of the figure seven composition invented by Eickemeyer, which was the first new scheme of arrangement discovered since the days of the Italian masters!" No wonder the Americans fail to find "Punch" amusing. The same writer tells us of the French pictures that "the average observer would take them to be monotypes," from which it is quite clear that either the critic or the "average observer" has not the faintest idea of what a monotype is. He might just as well have told us that "the average observer" took them to be anagrams or brachiopods. We point out that this criticism comes from the land of "Camera Work," lest we should be supposed to lump all our Transatlantic contemporaries in a general condemnation.

The Ilford Report.

Manufacturers and dealers are alike agreed that 1908 has been a very bad year for business, although, fortunately, things seem to be improving, and prospects for 1909 are distinctly brighter. The fact that the Ilford Company, in spite of the general depression, has shown a distinct improvement in its profits, leading to an increased dividend as well as an increase in the sum carried forward, is one upon which all concerned are to be congratulated. Someone must have been putting in a great deal of hard work and well directed energy.

The Lantern Lecture.

Dr. Vaughan Cornish's lecture on the Panama Canal, which was delivered before a crowded audience at the Royal Geographical Society the other night, was illustrated by an admirable series of lantern slides of that vast undertaking. Nothing could be better calculated to show the extent and progress of the work than com-

parison between photographs taken in 1907 and others in 1908. Incidentally, it may be added that the same lecture revealed another advantage of lantern illustration, or disadvantage of the want of it. The audience were provided with large maps of the canal, and during the first part of the lecture the lights were up, and the lecturer frequently referred to these maps. Whenever he did so, the rustling sound caused by the movement of some two or three hundred large sheets of paper caused his remarks to be quite inaudible for half a minute or so. Had the map itself been made into a slide and projected on the screen, this would have been avoided entirely.

A Sign of the Times.

If any justification were necessary for devoting a large share of this issue of *Photography and Focus* to the bromide process and its manipulations, it would be found in the extent to which it is replacing all other methods for the production of large work. Very few years ago, platinum and carbon figured largely at every exhibition. Now they are supplanted to an extraordinary extent by bromide paper. At the Edinburgh Photographic Society's exhibition, which opened last week, for example, we read, "It is noteworthy that practically all the pictures are bromide paper prints. Carbon and platinotype appear to have been discarded, and the newer gum and oil processes are altogether unrepresented." This is an extreme case, no doubt; but it is an indication how few, comparatively speaking, are the photographers who employ what are sometimes regarded as the exhibition processes, compared with the immense body of photographers who find that bromide, gaslight, and P.O.P. provide for all their wants as far as print-making is concerned. While oil printing, bromoil, and similar methods are comparatively new, the temptation to an editor to deal at length with them is a very great one; and a note such as that which we have quoted comes as a valuable reminder that for every reader who makes an oil print there are a hundred who make bromide enlargements, and perhaps a thousand or more who never print in anything but P.O.P. or gaslight.

THE PICTURE REPRODUCED on page 591 of *Photography and Focus* for November 24th was without a title and without the author's name. We now learn that it should have been called "To the Haven under the Hill," and that it is by Mr. W. Henley.

Photography in the Winter Evenings.

THIS is the second of the five issues of *Photography and Focus* that are specially devoted to indoor winter photography. Last week's issue gave particular attention to gaslight printing; this week bromide printing and development forms the topic. The complete list of the various issues, and the subjects with which they deal, are as follows:

Dec. 1.—Gaslight Papers.

Dec. 8.—Bromide Papers.

Dec. 15.—Lantern Slide Making.

Dec. 22.—Enlarging Methods.

Dec. 29.—Negative Making on
Winter Evenings.

The publishers ask us to point out that they will be pleased to send a specimen copy of one of these issues to any photographer with whose address they are furnished by a reader; so that those who would like to draw the attention of their friends to the series need only send a postcard to Messrs. Iliffe & Sons Ltd., at 20, Tudor Street, London, E.C.

USING BROMIDE PAPER.

By the Editor. A Beginner's Article.

This is the second of the series of elementary articles dealing with those forms of photography that can be practised indoors, on a winter's evening. The first, published last week, had gaslight papers for its subject.



BROMIDE paper chiefly differs from gaslight paper, as far as the user is concerned, in being more sensi-

tive. This prevents us from working it in ordinary gaslight; a dark room is necessary. It is not so amenable to

modified development to get a warm tone, and it is, therefore, better to stick to one of the ordinary forms of developer, which give good black and white prints, and, if warm tones are wanted, to resort to toning processes afterwards.

Although more sensitive to light than gaslight paper, it is less easily spoilt in development, and there are a great many developers which will give excellent bromide prints, although quite unsuitable for gaslight paper. It is less subject to "stress marks": though these may be met with at times.

Bromide paper does not give so much contrast as gaslight paper, so that if we have a negative in which the contrasts are too great it is best to use bromide paper for it; if one in which they are too weak, gaslight paper is preferable.

As the manipulations of bromide and gaslight prints are so much alike, there will be no need to go again over much of the ground traversed in last week's article. The first important difference is in the illumination of the dark room. Although bromide paper is coated with an emulsion very similar to

that on a dry plate, it does not call for so deep a ruby light in the dark room as has to be used when extra rapid plates are developed. Many workers use a yellow light for bromide paper, one thickness of yellow glass being placed in the lantern. Bromide paper can be

handled in such a light without any fogging; but it is hardly safe for the beginner to attempt to do so, as he will naturally want to see what he is doing, and unless he is very careful, will expose his paper to the light too much. For this reason a light red is to be preferred, either a single thickness of ruby glass, or, better still, one of the lightest of the "safe-light" screens which are now commercially obtainable.

Metol-hydrokinone can be used for bromide paper, but the developer that is most popular is, beyond all question, amidol. It has one drawback, in that it cannot be kept in solution satisfactorily for more than a couple of days, but as its ingredients are few in number and very soluble in water, it is not much trouble to make it up. Only enough for immediate requirements should be mixed up therefore. A dozen pieces of quarter-plate or postcard size can be developed in ten ounces of developer, dividing the ten ounces into four, and using each portion for three prints. This is a



SEA URCHINS.

BY J. HERBERT SAUNDERS.

Awarded the Bronze Plaque in the Special Subject Competition.

generous allowance of developer, and the old hand will do as well with very much less; but it is well at first to run no risk of spoiling the prints, either from using the same developer for too many, or from having insufficient solution to cover the paper easily.

Ten ounces of amidol developer can be made up by placing in a bottle that will hold about a pint, twenty-five grains of amidol, five grains of potassium bromide (or fifty minims of a ten per cent. solution, if the bromide is kept in this form), and threequarters of an ounce of sodium sulphite crystals (avoirdupois or apothecaries' ounce makes no appreciable difference in this case). The amidol should be either white or grey. If it is black it is an old sample, and should not be used. The sulphite after weighing out should be wrapped up in paper and rolled with a bottle or other hard round object to crush the larger crystals. Ten ounces of water are then poured into the bottle and the mixture is shaken until all is dissolved, which will be the case in a very few minutes. The developer is then ready for use.

Although amidol is the general favourite for bromide paper, those who use metol-hydrokinone for negative work or for gaslight paper may like to use it for bromide also, in order to keep down the number of bottles in the dark room. A metol-hydrokinone developer which acts excellently both for gaslight and for bromide papers is made by dissolving in ten ounces of water in the order named eight grains of metol, thirty grains of hydrokinone, threequarters of an ounce of sodium sulphite crystals, threequarters of an ounce of sodium carbonate crystals, and three grains of potassium bromide. This developer will keep in good working order in a well corked bottle for a long time.

If the metol-hydrokinone developer is used, the fixing bath given on page 611 last week may be employed, but for amidol it is better to omit the metabisulphite. As in the case of gaslight prints, it is important to keep the photograph well under the surface of the solution during fixing.

There is no need to go into the dark room to make bromide prints if the ordinary living room can be made dark enough. A fire in the room, if it has not got a lot of bright flame, will not fog the paper, unless this is exposed to direct light from it. If we sit up to the table with the back to the fire, the paper can be manipu-



TENNIS.

BY H. HALL.

Awarded a Prize of One Guinea in the Instantaneous Class in the Marion Competition.

lated quite safely, and in greater comfort on a winter's night than we should be likely to find in a cold dark room.

Having mixed the developer and got the fixing bath ready, the problem of exposure arises. Magnesium ribbon is too powerful, and incandescent gas is by no means a necessity. We shall find that at a foot from the ordinary gas burner a very few seconds exposure will suffice, but precisely what that exposure should be must be found by trial. The procedure described last week may be followed, merely altering the time. Holding the printing frame a foot away from the gas, which must be turned full on, just short of "roaring," covering the whole of the negative while doing so with a card, the card is taken quickly away and an exposure

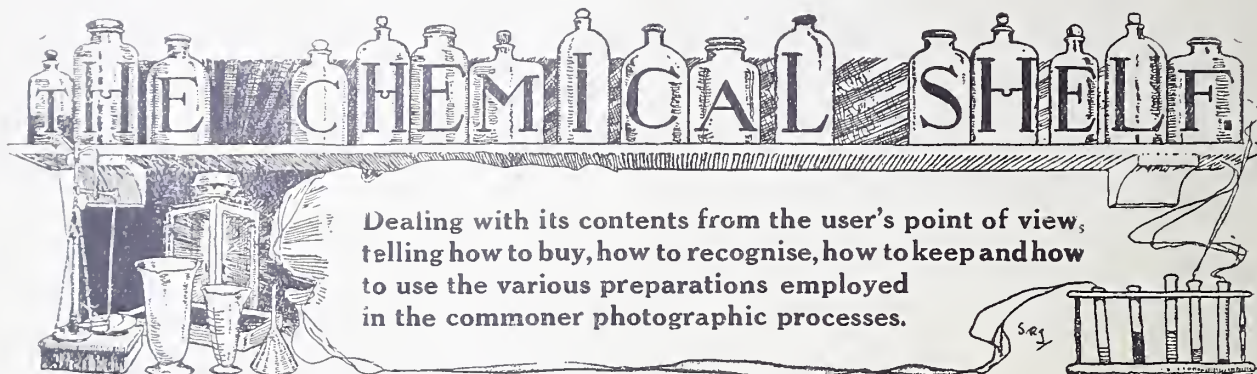
of two seconds given. Then an inch of the negative is covered up for two more seconds, making four in all; another inch is covered until eight seconds have elapsed; another until sixteen; and the last portion of the negative receives thirty-two. The light is then turned down and development put in hand.

In the case of gaslight paper, it is important that the developer should be strong and its action rapid, or the print is weak and of poor colour. Gaslight prints are, therefore, placed dry in the developer. There is no such necessity with bromide prints, so that the paper, before development, may be allowed to soak for half a minute or so in water, as this makes it lie flat on the dish, and is a guarantee against markings due to the developer not wetting it all over at once.

Development in the case of bromide prints takes longer than it does with gaslight papers. In a

leaderette recently the importance of complete development was pointed out, and the letter from the Birmingham Photographic Co., published in last week's issue, emphasised this fact; so there is no need to go at length over ground covered so recently. All we need say here is that the development must be carried on until the action of the developer seems to slow down and almost to stop; and that if this gives us too dark a print, it is not a sign of over-development but of over-exposure. If we develop the trial print in this way, we shall have no difficulty in learning from it three things—(1) what is the correct exposure for that negative, (2) what under-exposure looks like, and (3) what over-exposure looks like. Guided by the trial print, the next piece of paper to be exposed should give a good print straight away.

The fixing and washing of bromide prints are conducted in the same way as for gaslight prints.



POTASSIUM CHLOROPLATINITE.

Potassium chloroplatinite, also known as chloroplatinite of potassium or potassium platinum chloride, is a costly salt, usually sold like gold chloride, sealed in glass tubes reputed to contain fifteen grains. If the make of a reliable firm—and none other should on any account be purchased—it may be trusted to be of good quality and full weight. The substance has the form of very small red crystals, freely soluble in water, forming a reddish brown solution. Like all platinum compounds, potassium chloroplatinite is highly poisonous.

So long as it remains sealed up in the tubes, potassium chloroplatinite keeps for any length of time unaltered. It keeps very well, also, if dissolved in distilled water, and usually, also, if tap water is employed. Sometimes, however, in the latter case, part at least of the chloroplatinite is decomposed by some impurity in the water, and a black precipitate forms. It does no harm beyond weakening the solution, the strength of which may be gauged by its colour. It is said that a solution in which this black sediment has formed may be restored by adding a couple of minims of strong hydrochloric acid for each ten grains of chloroplatinite originally in the solution, and boiling the liquid in a glass flask for two or three minutes. But it is better to avoid it by using distilled water, preferably slightly acidified with hydrochloric acid, to make up the solution, and keeping it in a clean bottle with a stopper rather than a cork. A convenient strength of solution is that generally adopted with gold chloride, namely, one grain of the salt to each dram of the solution. If the contents of a fifteen-grain tube of chloroplatinite are dissolved in one ounce and a half of distilled water, to which one drop of pure hydrochloric acid has been added, and the bulk of the liquid is then made up to fifteen drams with distilled water, a stock solution of this strength is obtained.

Potassium chloroplatinite is used for platinum toning. It is also very largely used in the manufacture of platinum paper, but this need not concern us. Platinum toning is very suitable for matt P.O.P. and for plain salted paper, but the colours it gives—generally a brown or cold sepia—are not so suitable for glossy P.O.P. The nearest approach to a black tone that can be got on P.O.P. is obtained by toning the

prints very slightly in one of the ordinary gold toning baths, rinsing them and transferring them to a platinum toning bath as soon as any change of colour is perceptible.

FORMULÆ.

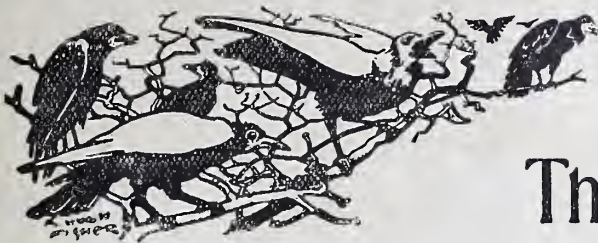
<i>Platinum-Salt Toning Bath for Matt P.O.P.</i>			
Potassium chloroplatinite	...	...	1 grain
Common salt	...	...	15 grains
Citric acid	...	...	15 "
Water	...	...	10 ounces

<i>Platinum Toning Bath with Phosphoric Acid.</i>			
Potassium chloroplatinite	...	...	1 grain
Liquid phosphoric acid, dil. B.P.	...	...	3 drams
Water	...	...	10 ounces

The prints are washed, then placed in either the above baths (either without or after gold toning), and after they have toned far enough are placed for two or three minutes in a solution of twenty grains of bicarbonate of soda in ten ounces of water. They are then rinsed and fixed in plain hypo. These baths are equally suitable for plain salted paper or for matt P.O.P.

POTASSIUM CHROMATE.

Potassium chromate, or neutral chromate of potassium, not to be confused with potassium bichromate, is met with in the form of yellow crystals, extremely soluble in water, forming a yellow solution. Although used in sensitising carbon tissue, the potassium chromate is never purchased as such. Potassium bichromate is employed, and, on the addition of ammonia to its solution, as in making up the Bennett formula, potassium chromate and ammonium chromate are formed in the liquids, a change which takes place when the addition of ammonia has been carried so far that the colour of the liquid alters, passing from the well-known red tint of a solution of potassium bichromate to a lemon yellow. Although in this form potassium chromate enters into the composition of the best sensitising bath for carbon tissue, it cannot (according to Dr. Liesegang) be used direct for making a sensitising bath, so that it need not be referred to further in this place, details having been given for making up the Bennett formula under "Potassium Bichromate." (See *Photography and Focus*, November 10th, 1908, page 555.)



The Week's Meetings.

MONDAY, DECEMBER 7TH.

Walthamstow P.S. "Antiquarian Rambles in Essex." A. P. Wire.
 Wolverhampton P.S. "Preparation of Photographs for Exhibition." J. Gale.
 Manchester Y.M.C.A.P.S. "Velox Paper." W. F. Slater.
 Stafford P.S. "Carbon and Ozobrome." W. L. Hey.
 Canterbury C.C. "Half Hours with Nature." F. C. Snell.
 Southampton C.C. Affiliation Lecture.
 Bradford G.S. P.S. "India." Mr. Goodrich.
 Oxford C.C. Affiliation Slides.
 Wallasey A.P.S. Union Slides.
 Bowes Park and D.P.S. Beginners' Class. Technical Demonstration.
 Catford and F.H. P.S. "Kent and Surrey with Walker Miles." A. Bedding.
 South London P.S. Lecturette Competition.
 Leek P.S. Monthly Lantern Night.
 Bournville and D.P.S. Slide Making.
 Cleveland C.C. Enlarging Night.
 Bradford P.S. "Large Bromide Prints from Small Negatives." A. Bracewell.
 Kidderminster and D.P.S. Prize Slides.
 Cripplegate P.S. "Bromoil." F. J. Mortimer.
 Glasgow & W. of S. A.P.A. "Mounting and Finishing." J. M'Kissack.
 Preston C.C. "Control in Slide Making." T. H. Greenhall.
 Scarborough and District P.S. *Photography and Focus* 1908 Prize Slides.

TUESDAY, DECEMBER 8TH.

Birmingham P.S. "Bromoil." J. Gale.
 Epsom & D. L. & S.S. Goerz Lenses.
 St. Helens C.C. "Bromoil." A. Poole.
 Halifax C.C. "Velox Paper." W. F. Slater.
 Slough P.S. "Velox Paper." Kodak Ltd.
 Hanley P.S. Thornton-Pickard Prize Slides. R. Heskeith.
 Bootle P.S. Exhibition.
 Glasgow Southern P.A. "Pictorial Expression." W. C. S. Ferguson.
 Ashton-under-Lyne P.S. "Flashlight Photography." W. Atkinson.
 Leeds P.S. "Enlarged Negatives on Paper." R. Stockdale.
 Monklands P.S. "In the Land of the Vikings." J. Wilson Paterson.
 Nelson C.C. Club Portfolio.
 Hackney P.S. Excursions Exhibition and Competition.
 Chelmsford P.S. "Flower Photography." E. Seymour.
 Nelson P.S. Chat on Lenses.
 Doncaster C.C. "Practical Faking." T. H. Connor.
 Preston S.S. "Carbon. Single Transfer." W. Entwistle.
 Acton & Chiswick Poly. P.C. Print Competition—Xmas Postcards.

WEDNESDAY, DECEMBER 9TH.

Borough Poly. P.S. "After Treatment of the Negative." P. Carden.
 Kinning Park Co-op. Soc. C.C. Exhibition.
 Coventry P.C. "Enlarged Negatives." R. E. Woolmer.
 Acton P.S. Competition. "Xmas Cards."
 Brighouse P.S. "Velox Paper." W. F. Slater.
 Chiswick C.C. Social Evening.
 Hampstead P.S. "Holiday Papers." P. H. Williams and H. N. Smart.
 G.E.R. Mech. Inst. "Mounts and Mounting." H. W. Bennett.
 Rochdale A.P.S. "Home Portraiture." H. Wood.
 Wimbledon Park P.S. "With the Sky and a Camera." T. F. Connolly.
 Chorley P.S. *Photography and Focus* Prize Slides.
 Sale P.S. "The Rules of Composition." J. A. Grindrod.
 Leeds C.C. "Florence to Marseilles." C. B. Howdill.
 North Middlesex P.S. "Cristod Films." E. Ridge.
 Woodford P.S. "Ozobrome." T. Manly.

Societies will have their meetings announced here if the syllabus is sent to us at the beginning of the Session, or from time to time.

WEDNESDAY, DECEMBER 9TH (continued)

Bristol P.C. "English, Scotch, and Irish Scenery." C. S. Wills.
 South Suburban P.S. "A French Wonderland." J. A. Sinclair.
 G.W.R. Lit. S. "Intensification and Reduction." J. McIntosh.
 Croydon C.C. "A Dive into Belgium." W. L. F. Wastell.
 Birmingham P.S. "Warm Tones on Lantern Slides." E. A. Biermann.
 Chorley P.S. 1908 Prize Slides.

THURSDAY, DECEMBER 10TH.

Hull P.S. "The Oil Process." C. F. Inston.
 Photo Art Club (Atterden). Informal Meeting.
 Ilford P.S. "Westminster Abbey." S. G. Kimter.
 Leigh P.S. "Science and Art in Photography." J. Tonge.
 Spen Valley L. & S.S. "Velox Paper." W. F. Slater.
 Chelsea & D.P.S. "Flower Photography." E. Seymour.
 Armley & Wortley P.S. "Land's End to Shrewsbury." G. Bingley.
 Bailey & D.P.S. "Oil Printing." Albert Lyles.
 Liverpool A.P.A. "The City of Oxford." W. A. Taylor.
 North-West London P.S. "Norway and the Arctic Circle." W. Kilbey.
 Rugby P.S. "Carbon Process." A. W. Fell.
 Dublin C.C. "Kodak Photography." T. R. Dale.
 Monklands P.S. "Cycle and Camera in the South of Scotland." R. Dunlop.
 Ealing P.S. Demonstration in the Dark Room.
 Maidstone & Inst. C.C. "Carbon Process." H. Witcombe.
 Rodley F.C. & B.P.S. "Ozobrome." Mr. Womersley.
 Melbourne C.C. "Exposure and Development." Charles H. Gore.
 Richmond C.C. Pollens. Dr. Roeman.
 Bolton A.P.S. *Photography and Focus* Prize Slides.
 Watford C.C. "Carbon Process." Autotype Company.
 Broomfield P.S. "Y.P.A. Portfolio."
 L.C.C. School of Photo Eng. "The Albert Etching Machine." W. Gamble.
 Dover Inst. P.S. "Negative Work." E. C. Herring.
 Bolton Amateur P.S. 1908 Prize Slides.

FRIDAY, DECEMBER 11TH.

Oliver Goldsmith P.S. "Oil Printing." H. Featherstone.
 Colne C.C. "Velox Paper." W. F. Slater.
 Birkenhead P.A. "How to Make an Enlarged Negative." J. Walker.
 Watford P.S. "The English Cathedrals." H. W. Bennett.
 Woolwich P.S. "Multiple Mounting—Passe Partout Framing." F. E. Elwood.
 Lincoln A.P.S. Slide Competition.

SATURDAY, DECEMBER 12TH.

Walthamstow P.S. Social Tea.
 Bournville & D.P.S. "Natural History with a Camera." R. Hancock.
 Edinburgh P.S. "A Scamper through Holland." Zeeland Steamship Co., Ltd.
 Lyceum P. & A.S., Oldham. 1908 Prize Slides.

MONDAY, DECEMBER 14TH.

Cleveland C.C. "Velox Paper." W. F. Slater.
 Scarborough & D.P.S. "Pictorial Slides and Prints." H. & C. E. Wanless.
 Southampton C.C. "The Flower World." E. Seymour.
 Bowes Park & D.P.S. "Photographic Lenses." Dr. A. R. F. Evershed.
 Bradford P.S. "Lantern Slide Making." F. Nicholson.
 Northampton N.H.S. & F.C. "Enlarging." R. and H. Chapman.
 Bedford C.C. "The Oil Process." Basil Schön.
 Preston C.C. "English Architecture." W. Cowperthwaite.
 Lancaster P.S. "Making, Mounting, and Binding of Lantern Slides."
 Handsworth P.S. Conversation.
 Walsall P.S. "An Artist's Views on the Subject." R. R. Carter.

A Christmas Card Competition. Rules and Prizes.

WE offer a signed copy of "The Complete Photographer," the half-guinea work by the Editor of *Photography and Focus*, now in its second edition, to the sender of the best photographic Christmas or New Year card. The sender of the second best will be allowed to select photographic books to the value of five shillings from Messrs. Iliffe and Sons' list; and the sender of the third best, books to the value of half a crown.

The cards must be either wholly or in part photographic; the photographic part must be the work of the sender; commercial Christmas card mounts or sensitised cards may be used, but the extent of the competitor's own work in the finished card will carry weight in making the awards.

Each competitor may send in any number of cards, but each card must be posted separately, and each must bear the name and address of the sender.

The copyright of all cards, winning and otherwise, will remain the property of the competitors, but the publishers of *Photography and Focus* shall have the right to reproduce in that paper, without payment, any of the cards sent in.

No cards can be returned or criticised, nor can correspondence be entered into concerning the competition.

All cards must be addressed, "The Editor of *Photography and Focus*, 20, Tudor Street, London, E.C., and must be distinctly marked on the outside, "Christmas Card Competition." They must be sent by post, and must reach Tudor Street by the first post on Thursday morning, December 24th. Competitors are reminded that postal delays are to be expected near Christmas, so that ample time should be allowed, as no extension can be granted. All packets arriving with excess postage to pay are refused, so that care should be taken to see that the postage is fully paid.

Chemically Modifying Bromide Prints.

BY DR. D'ARCY POWER.

This article, which we quote from the "American Annual of Photography" for 1909, which has just been published, gives working details of a method affording a very wide control over bromide prints and enlargements; and is well worth careful study by all those who use bromide paper for pictorial work.

CONTROL or modification of prints is necessary: First, because photography is not always capable of reproducing what the eye can see; and, secondly, because many now use photography to make pictures—for the delight of the eye or the stimulation of the emotions. How they make them is nobody's business so long as they conform to the canons of art. But that they may do this demands that the worker possess art training and a good technique. If he has not the first, and does not care to work for the second, he

had better leave this process alone, for he will only waste more good bromide paper by it than make good prints.

It may be asked, Why use chemical control when we can print in gum or oil? The answer is simply this—that the silver image possesses the power of reproducing texture in a manner that is impossible in any other medium; it is the glory of photography, and this beauty of the photographic print is left unimpaired by the processes that follow.

The technique I am about to describe can hardly be called new, inasmuch as the removal of all or part of the silver image by a reducer has been frequently advocated—and doubtless in some hands has given good results; but whether the solvent used was ferricyanide and hypo or iodine and potassium cyanide, it was always very difficult to control. Either it went where it was not wanted, or it removed too much at the point intended. In either case the print was ruined, and nothing could be done to rectify the damage.

By my method everything is under control; nothing is removed but what can be exactly restored to its original form. How is this possible? Very simply. Let me explain. The ferricyanide and hypo reducer in its latest and best form consists of

potassium bromide, and hypo. The two first-named salts act upon the silver image of a bromide print, converting the metallic deposit into one of creamy white silver bromide. The hypo dissolves this, removing it entirely. Such being the case, we can always effect our reduction by two steps—first placing the print in a weak solution of the two first salts, and then, when it has become light enough, transferring it to the plain hypo solution, which removes the changed silver.

But suppose, as may easily happen, that the reduction has got beyond control, and bleached the print to excess. All that need be done is to wash it, place it in any non-staining developer, and the image is immediately restored. By using the developer very weak it can be restored to the exact density required, or it may be fully restored and reduced afresh. Thus we can work backwards and forwards until the exact effect required is obtained, and when satisfied, a five minutes' immersion in the hypo bath, followed by a wash, will render our picture permanent.

So far I have only spoken of general alterations in the density, but it is obvious that, by the use of brushes, local reduction or local redevelopment is equally possible; and, provided the photographer is an artist and acquires the necessary technique, the chemical modification of a bromide print is as capable of expressing individual control as gum or oil.

The exact details of working are as follow: A sheet of wet blotting paper is placed on a board, and near at hand are placed two or three camel-hair brushes (one large and one small), one or two tufts of absorbent cotton, a little developer in a cup (any kind but pyro will do), a solution of ten grains of potassium ferricyanide and twenty grains of potassium bromide in one ounce of water, and a dish of hypo. The print to be modified is

From a Distant Reader.



A single stalk of Liliun Auratum grown in the open air, and carrying over seventy blooms.

By MISS MARJOR. A. HILL.

NELSON, B.C., CANADA.



ROSAMUND.

BY CAVENDISH MORTON.

Awarded the First Price in Class I, of the Marion Competition.

soaked in water placed on the damp blotting paper, and surface-dried with another blotter. A little of the bleaching fluid is put in a saucer and diluted with several times its bulk of water. A brush is charged with the mixture and carefully applied to the surface to be lightened or removed. If the surface to be modified is a large one, it is better to use the reducer weak, and apply it rapidly with a swab of absorbent cotton. On the other hand, if high lights are to be added or small dark objects entirely removed, then the reducer may be used at its full strength, with a brush that is small and almost dry. Thus applied, there will be no spreading. If by the use of the reducer the desired effect has been obtained, then all that is necessary is to rinse the print in water and fix it in hypo.

But it may happen that the action has gone too far, or that for some purpose a deposit of silver is required in a cleared area. To obtain these the print is rinsed free of reducer, and a weak amidol or other developer carefully applied to the parts that are to be restored. In this local redevelopment it is particularly necessary to work with a brush almost dry, and to allow a little time for the solution to act. If the action is proceeding too far, it can be instantly stopped by applying a swab of absorbent cotton moistened with a little weak acid. An error in over redevelopment can, of course, be corrected by fresh reduction. It is this complete control which constitutes both the novelty and the strength of the process. When all is as desired, the print is fixed in hypo, washed, and dried.

Usually there is no indication of treatment in the parts reduced, but should the slightest difference, of tint appear, it can be removed entirely by bleaching the print in an acid



THE SEWING MAID.

By J. CRUWYS RICHARDS.

Awarded the Third Prize in Class 1 in the Marion Competition.

bichromate solution (potassium bichromate five per cent., hydrochloric acid one per cent.), washing, and redeveloping. From this final print any number of ozobrome copies can be made.

The process provides for the modification of the print by lightening any part required; it is also possible to use a method that will permit of adding to as well as taking from the original deposit. A solution of mercuric chloride (one grain in four ounces) is made, and the print immersed in this bath until the lightest parts of the picture have lightened

to the tone one wishes them to be. The bichloride attacks all parts simultaneously, but the shadows will show little action at a time when the lighter tones are much bleached. The print is then immersed in a bath of two per cent. hydrochloric acid for a minute, washed, and surface-dried with blotting paper. A brush and non-staining developer may then be used to develop the parts that are to be darkened. By varying the strength of the developer, and checking its action with weak acid on a sponge, the worker can com-

pletely control the final tone. Prints modified in this manner do not require fixing. They are simply washed and dried. They show more double toning than those bleached by ferricyanide, and do not permit of copying in ozobrome. They can, however, be photographed and copies made from the new negative.

I have given extreme examples of modification, only to be undertaken with knowledge and care, but there is a large field for useful minor changes.

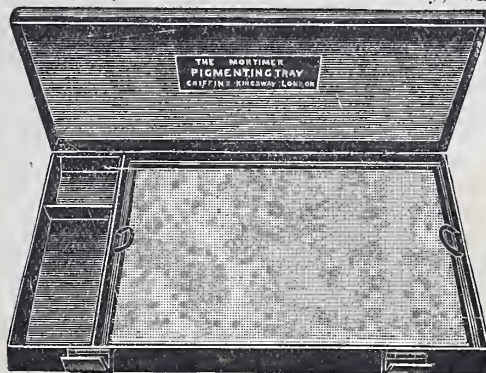
A Pigmenting Tray for the Oil Process.

THE pigmenting tray, which we illustrate below, is one which has been designed by Mr. Mortimer for the use of workers in oil or bromoil, and is being put on the market by Messrs. J. J. Griffin and Sons, Ltd., of Kingsway, London, W.C.

Those who have experienced the tenacity with which an oil print retains dust, and its uncanny power of collecting dirt, will appreciate the tray, which is not only convenient in use, but by means of its tight fitting lid, enables the print in its most sensitive condition to be put aside adequately protected. The division in the tray holds a pad of damp blotting paper, the frame with its linen cover drops on this and carries the print, which is thus kept moist, but is not in actual contact with the blotting paper itself. Divisions in the box are provided by which brushes and small palettes may be carried.

It is almost too much to hope that the provision of a utensil of this kind will inspire oil workers to carry their prints to the scene which they are to portray, and to ink them up on the spot; although it certainly provides a most efficient piece of apparatus for such a purpose. There is no doubt that many of the oil prints that we see at exhibitions would be all the better for being worked up with the original before the exhibitor at the time, but possibly it would be considered that the photographer by doing so was too

slavishly copying the painter. Anyhow, if he does want to do so, here is the very thing; and if he does not, it will serve him equally as well at home in his study, when like



the German artist and the camel he is evolving the ideal landscape from his inner consciousness.

The price of the Mortimer pigmenting tray, as shown in the illustration, is 5s. 9d.

Slides of the Famous Pictures of the World.

ALTHOUGH not strictly photographic in their interest, the set of slides of "Famous Pictures of the World," which has just been issued by Messrs. W. Butcher and Sons, Ltd., of Camera House, Farringdon Avenue, London, E.C., is one of which we feel certain that a great many of our readers who possess optical lanterns will be glad to know.

It was an excellent idea to reproduce in lantern slide form eighty of the greatest masterpieces of painting, and it has been capably carried out. The selection is one of the most catholic character, nearly every period and every school being represented in the list, as will be evident when we point out that amongst the painters whose works figure in the list are Murillo, Correggio, Raphael, Greuze, Titian, Botticelli, Leonardo da Vinci, Reynolds, Millet, Holbein, Morland, and Gainsborough. In fact, except Turner, almost all the great masters figure in this comprehensive set.

One of the very best aids to the improvement of one's picture making is the careful study of the world's masterpieces. It is given only to a few to be able to see the originals, scattered as they are over Europe and America; but for much of the photographer's purposes these slides provide what he wants, and many a photographic society could spend an evening or two more profitably by the exhibition of them than by the showing of a hundred or two commonplace slides the work of its members. The pictures have been reproduced by lithography, and are an excellent example of the perfection to which Messrs. Butcher have carried the process of making slides by mechanical means.

The list consists of ten series, each containing eight slides. Each set of eight slides, with a reading, sells at 4s., or the whole set of eighty in a polished mahogany transit box sells at 40s.

The Mascot Drying Line for Films and Prints.

SIMPLICITY is the feature of the little novelty known as the "Mascot Drying Line," yet, as with so many other simple things, it has real practical utility. It is made by Messrs. Houghtons, Ltd., of 88 and 89, High Holborn, London, W.C., and is put up in a neat box, which sells at 1s.



The "Mascot," which is shown in use in the illustration herewith, is a tape of strong holland, forming a kind of clothes line, which can be stretched by its two ends wherever

convenient. Along it are fastened a dozen clips, by means of which prints or films can be hung up to dry from the line.

The makers, in a leaflet, give the following directions to the amateur photographer using one of these lines: "Pin or tie up the strip of holland in a place where the films or prints can be dried without dust settling on them. If the room is likely to be used by other people, have the line high up, so that the drying films need not be touched. Strips of roll film can be dried quickly by clipping the film in several places along its length, so that it hangs parallel with the line, and not vertically. For overnight drying, the line can be stretched between the backs of two chairs. Clip the films as near the edge as possible, or in one corner. Postcards should be clipped close to one edge and trimmed along that edge afterwards. Do not force the clip open. Press the projecting point downwards slightly and away from the edge of the slot when removing the film, and the clip will open quite easily."

It is a handy little appliance, and we have no doubt will figure in many a workroom this winter.



BEGINNERS' COMPETITION.

Open to all photographers who have never taken an award.

PRIZES.

First Prize.—A signed copy of "The Complete Photographer," a half-guinea work by Mr. Child Bayley, now in its second edition.

Second Prize.—A free subscription to *Photography and Focus* for twelve months.

One or more certificates of honourable mention will also be awarded.

RULES.

(1) Each competitor can send as many prints as he likes, but each print must bear on the back the coupon, published each week, the name and address of the sender, the title of the picture, and no other writing whatsoever.

(2) No print will be eligible that is larger than 5½ in. x 3½ in. (postcard size) or 5 in. x 4 in.

(3) No print must be mounted.

(4) No handwork other than simple spotting is permitted on negative or print, nor shading or dodging of any kind. It is distinctly understood that entry in the competition implies a declaration by the competitor that this rule has been complied with; and in case of dispute, the editor shall have the right to call for the negative from which the entry purports to be a simple direct contact print.

(5) No prints will be returned, and no correspondence with regard to the competition can be undertaken.

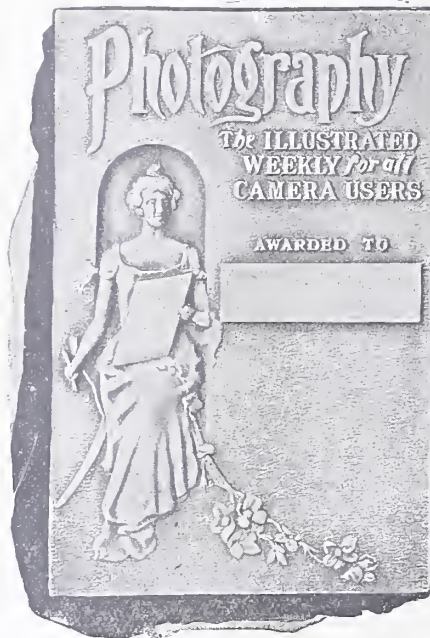
(6) The publishers of *Photography and Focus* shall have the right to reproduce, without payment, any of the prints sent in, winning or otherwise. But except the winning prints, the names of competitors of other prints that may be reproduced will not be published without the competitor's consent.

(7) All entries must be addressed "Beginners' Competition," the Editor of *Photography and Focus*, 20, Tudor Street, London, E.C., and must be delivered at that address by the first post on the closing date at the very latest.

CLOSING DATE.—Thursday, Dec 31st.

XMAS CARD COMPETITION.

For particulars and rules see page 629.



ADVANCED WORKERS' PRINT COMPETITION.

PRIZES.

First.—"Photography" Silver Plaque.
Second.—"Photography" Bronze Plaque.
Third.—"Photography" Bronze Medal.
One or more certificates of honourable mention will also be awarded.

RULES.

(1) All photographs must be sent addressed "Advanced Competition," the Editor of *Photography and Focus*, 20, Tudor Street, London, E.C., postage paid, to reach there not later than the first post on the closing date, and must contain a stamped addressed envelope or label (not loose stamps) if they are to be returned.

(2) Each photograph must be mounted, but not framed. Prints in slip-in mounts are not eligible. Each must bear on the back the name and address of the sender and the title of the picture. No letters or other communications must be enclosed with the prints. Every print must bear attached to its mount a coupon for the competition of the month, which will be found in each issue of the paper.

(3) Each photograph must be the work of the competitor as regards selection and arrangement of the subject, exposure and development of the negative, and printing, development or toning, and mounting of the print.

(4) The prints which are accompanied by stamped envelopes or labels will be criticised by post, and the editor shall have the right to reproduce any of the prints, winning or otherwise. The awards will be made a fortnight after the closing date.

(5) Awards may be increased or withheld at the absolute discretion of the judge, and in all cases of dispute the decision of the editor will be final.

(6) There is no restriction as to the eligibility, except as set forth in these rules, and except that the same negative must not be used more than once in the competition. That is to say, that a print from it once submitted, all further prints however varied, are ineligible.

(7) Neither editor nor publishers of *Photography and Focus* shall be held in any way responsible for the safety of prints or for their return to the competitors.

(8) The sending of a print to the competition will be regarded as a declaration to the effect that it is eligible under these rules, and that the competitor agrees thereto.

CLOSING DATE.—Thursday, Dec. 31st

SPECIAL SUBJECT COMPETITIONS. OPEN TO ALL READERS.

PRIZES.

First Prize.—"Photography" Plaque in Silver.
Second Prize.—"Photography" Plaque in Bronze.
Third Prize.—"Photography" Medal in Bronze.
One or more certificates will also be awarded.

RULES.

(1) The subject of each photograph entered must be that announced for the particular competition.

(2) Each competitor can send as many prints as he likes, but each print must bear on the back the name and address of the sender, the title of the picture, and no other writing whatsoever. Each print must have attached to it a coupon for the competition of the month, which will be found in each issue of the paper.

(3) No print must be mounted. No handwork other than simple spotting is permitted on negative or print, nor shading or dodging of any kind. It is distinctly understood that entry in the competition implies a declaration by the competitor that this rule has been complied with; and in case of dispute, the editor shall have

the right to call for the original negative from which the entry purports to be a simple direct contact print.

(4) No prints will be returned, and no correspondence with regard to the competition can be undertaken.

(5) The publishers of *Photography and Focus* shall have the right to reproduce, without payment, any of the prints sent in, winning or otherwise. But except the winning prints, the names of the senders of other prints that may be reproduced will not be published without the sender's consent.

(6) All entries must be addressed "Special Subject Competition," the Editor of *Photography and Focus*, 20, Tudor Street, London, E.C., and must be delivered at that address by the first post on the closing date at the very latest.

SUBJECTS AND CLOSING DATES.

A subject suitable for use as a Christmas or New Year Card. Closes Thursday, December 31st.

A Winter Landscape. Closes Saturday, Jan. 30th, 1909.

A Portrait by Artificial Light. Closes Saturday, Feb. 27th, 1909.

An Inexpensive Dry Mounting Process. By W. McClean.

Special to "Photography and Focus."



THE percentage of amateur photographers' prints which attain to the final stage of completion—that is to say, mounting—I am inclined to think is a very small one. If one asks the average worker why more of his prints are not finished, he will probably say he has no time or else it is too much trouble.

He does not care to admit that his attempts were not a success, that his starch paste would not stick, that the prints slipped about under the continued rolling of the squeegee, or that in place of the beautiful gloss there remained a half-matt surface diversified by spots of squeezed-out mountant.

All these troubles vanish when dry mounting is employed, as anyone who follows the instructions given below will find. The cost is so trifling that it need hardly be considered; a flat iron is all the apparatus that is required, and the process is simply no trouble at all.

The mountant used is shellac. A wide-mouthed jar with a metal screw-cap is the most convenient receptacle for it. The cap should be air-tight when screwed tightly up, and this can be ensured by cutting a circle of stiff cardboard to fit inside it and so to press on the edge of the jar. An ounce of orange shellac is purchased (at a cost of twopence), placed in the jar, and an ounce and a half of methylated spirit is poured over it. The cap is screwed tightly down, and the jar set aside in a warm place, that the shellac may dissolve. This can be helped by stirring the mixture occasionally with a glass rod. When all is dissolved, it should be of about the consistence of treacle, and is then ready for use. The proportions stated above will be found to be about right, but if they give a mixture that is too thin or too thick, more lac or spirit may be added.

My own experiences have all been obtained with a box iron, so I am unable to speak of the convenience of the gas or charcoal irons on the market; but the old-fashioned flat iron, which can generally be obtained for a few pence, will answer the purpose as well as any other. Care must be used with it, however, as the handle has a knack of feeling warmer than it looks.

For applying the mountant, a camel-hair mop will be found better than the cheap glue or paste brushes; but it must not be allowed to dry after use, but be cleaned in a little methylated spirit, which may be saved and used to dilute the mountant when it becomes too thick.

The prints are all the better for the use of a formalin hardening bath after fixing and washing. When they are dry, and before trimming them, they are held face downwards on a piece of waste paper, and given an even coat of the mountant on the back. All stray hairs are removed, and the prints set aside to dry, which does not take very long. When dry, they can be stored away until it is convenient for the trimming and mounting to be put in hand.

This operation is simplicity itself. The prints are trimmed in the usual way, the iron is heated, and a few sheets of glazed or smooth paper are provided. The mount is laid upon a flat board or on the table, the trimmed print is put down upon it and adjusted in position, being held down with one hand, while, with the other, one or two sheets of the smooth paper are laid on the top of it. The hot iron is then quickly and evenly passed over the position of the print, when the heat causes the shellac to melt, and the weight of the iron presses the print and mount into contact. When the iron is removed, a heavy book or other similar object may be placed on the top, while the lot cools. Then on removing the book and the papers, we shall find that if the iron was hot enough the print has been firmly and smoothly attached to its mount. If the iron was too cold, or was not left on long enough, the print will only stick in parts, and another application of the iron will be necessary.

The iron must be clean and smooth to enable it to glide

over the paper. On no account should it be used without some protection for the face of the print and mount. The great difficulty will be to gauge correctly the heat required, as if it is too hot, especially with prints that have not been hardened with formalin, it may injure them. A little practice, however, will soon give the operator the knack, if there is any, of using the iron. If it is thought to be too hot, more sheets of paper may be put between it and the print, and these may be removed one at a time until the heat that penetrates is found to be just sufficient to cause the print to adhere without burning it.

Such is the process as I work it myself. Its advantages are many, and amongst them not the least is that it entirely does away with cockling.

A few "don'ts" and the subject may be left: Don't use the

mountant too thick, or the hot iron will squeeze out the molten shellac and spread it over the mount. Don't attempt to mount until the mountant is thoroughly dry. Don't use the best prints for the first trials of the process. And, lastly, don't call the process unworkable because the first attempts are failures.



A PORTRAIT STUDY.

By F. F. WELLS.

Awarded the Second Prize in the Beginners' Competition.

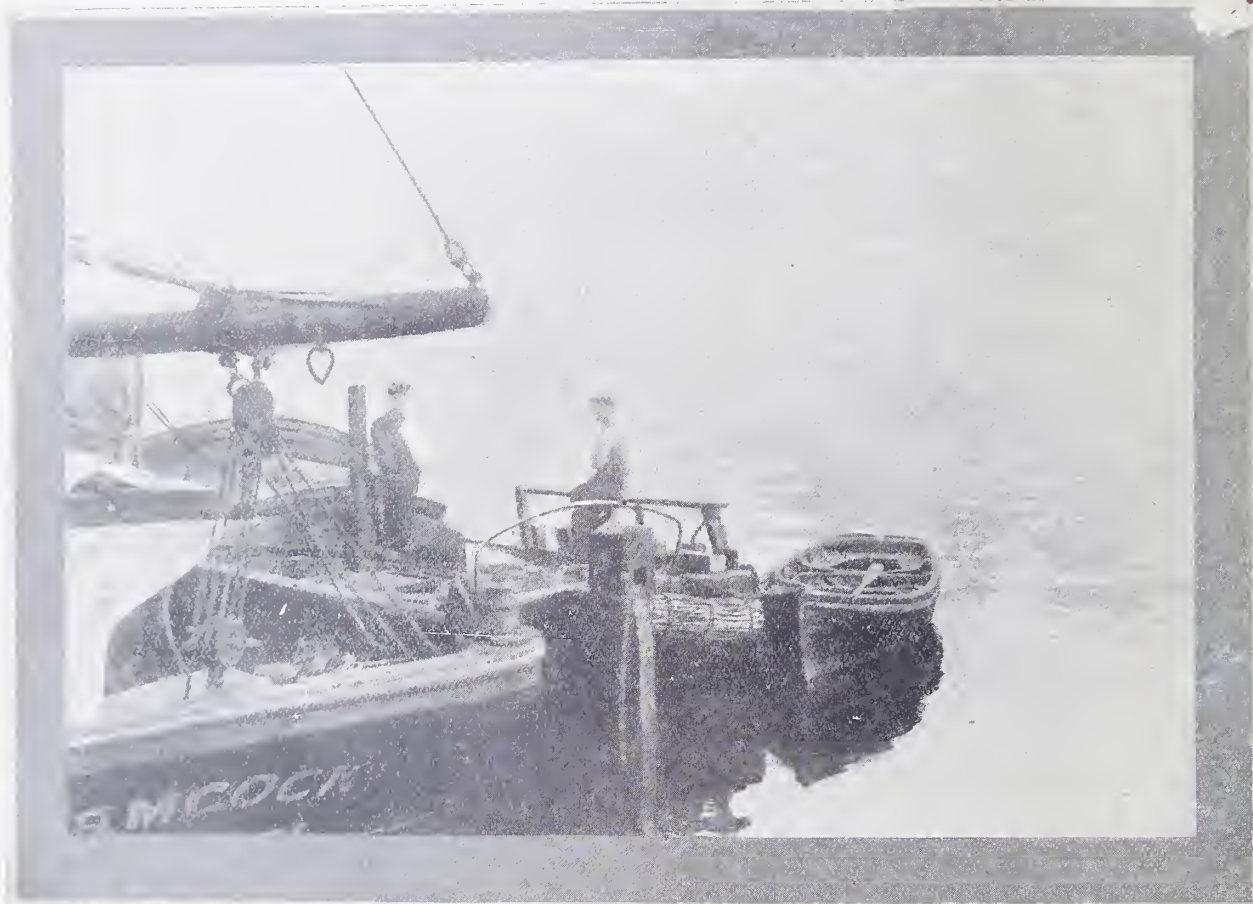


Sulphide Toning Troubles.

By "A Professional." Special to "Photography and Focus."

IN spite of the apparent simplicity of the sulphide method of toning bromide and gaslight prints, some of the results one sees about indicate that the process is not always worked so as to get the best results. The fine rich sepia colour which should result in every case when a good vigorous black and white print is toned becomes very often an unpleasant brown, and at times the picture loses a great deal of its

ingredient makes no perceptible difference to the result. I use a quarter of an ounce of each to the pint of water, and take care to leave the prints in this bath until there is no doubt that the bleaching action has gone as far as it will go. If the prints before bleaching were not washed so as to remove completely all traces of hypo, it is only reasonable to suppose that the toning action would be accompanied by a reduction of vigour, since, as is well known, ferricyanide and hypo form a powerful reducer. But this could only happen from gross carelessness, and the more potent factor in giving poor.



AN OCTOBER MORNING.

By J. F. WILDE.

Awarded a Bronze Plaque in the *Advanced Workers' Competition*.

vigour. The writer, when the process was a comparative novelty, met with experiences of this sort on several occasions, and, working the method professionally, was compelled to find out the reasons for the failure and to remove them. Since that time he has had no further trouble, but knows that many others have not been so fortunate.

The actual composition of the solutions used is not of very great importance. Equal parts of potassium bromide (or ammonium bromide) and of potassium ferricyanide are what are generally used, and a little more or less of either

weak prints only comes into play after the bleaching has taken place.

It is in the use of an unsuitable sulphide bath that failure most often lies. In the original instructions given by Mr. Blake Smith, the prints were darkened by being placed in a mixture of one ounce of twelve per cent. solution of sodium sulphide with twelve to twenty ounces of water. The sulphide has a very powerful action on gelatine, and at this strength blisters often made their appearance. To prevent this, the sulphide solution was diluted, often to such an extent that

it took three or four minutes to darken the print. Such prints are never so rich in colour as when the action is complete in a few seconds.

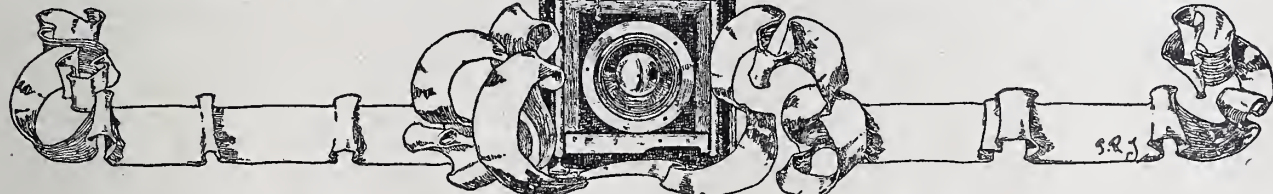
To prevent blistering or a general softening of the image, the prints before toning should be hardened either in alum or in formalin. If they are placed, when they come from the last washing water, in a five per cent. solution of alum for five or ten minutes, and are then further washed in a few changes, the film will be hardened so that it will not be injured even if the sulphide solution is used at double the strength just mentioned. I take one ounce of the stock solution of sulphide (twelve per cent.), and dilute it with water to make ten ounces, and find that by so doing the alumed print is not affected, and the colour obtained is rich and good.

This result can only be ensured, however, by taking care also that the sulphide is in good condition. Sodium sulphide keeps very badly indeed in the dry state. It soon goes damp and wet, and a liquid collects at the bottom of the bottle. It must not be supposed that this liquid is merely a solution

of the sulphide in water it has absorbed from the air. It is not. The sulphide in such liquid has to a great extent decomposed, and if this is used to darken the print it will certainly lead to a great reduction in its strength. It has been suggested that one of the products of the decomposition of sodium sulphide is hypo; and it is possible that the reduction is due to the presence of this enemy of the photographer. On this point I cannot speak; but that the print is greatly weakened when any of this liquid is present in the sulphiding solution is certain. The sulphide solution should be made up with the dry crystals, and as sulphide seems to keep better in solution than in crystal, only a little of the salt should be bought at a time, and all of it should be dissolved up. Stock solution of sulphide more than a month old is better thrown away.

It will be seen that it is in the darkening and not in the bleaching that there is most risk of failure, but by attention to these points there should be no difficulty in turning every good black print into a rich brown one. If the original print is pale and weak, or only just dark enough in its black stage, it is not suitable for toning by this process at all.

PRACTICAL PARAGRAPHS



TO IMPROVE RUSTY PRINTS. There is a very easy method for improving rusty bromide prints. They are first bleached in the ordinary ferricyanide-bromide bleaching bath as used for sulphur toning, and are washed in running water for ten minutes. They are then developed again in a developer of the same composition as is usually employed for developing bromide prints in the first instance, except that any bromide it might contain is best omitted. All the operations can be conducted in the ordinary light. No refixing is required.

* * *

CONTROL IN PRINTING BROMIDES. Although the best bromide prints are those which can be made in a straightforward way from the negative without any dodging at all, there is a degree of control which can be exercised very usefully at times by altering merely the distance of the printing frame from the light. The exposure "varies inversely as the square of the distance," as every photographer knows. At six feet a negative requires thirty-six times as long as at one foot, because $6 \times 6 = 36$, while $1 \times 1 = 1$. But the same negative gives quite different prints under the two conditions. If it need ten seconds at a foot, and we make the second exposure 360 seconds at six feet, and develop the two prints side by side, it will be found that the print made at the greater distance is stronger in contrast—brighter, in fact—than that made nearer the light. Both will be correctly exposed, but one will be softer than the other. Negatives which have plenty of contrast are therefore best printed near the light; those which are thin may be printed at a greater distance; and, if that is not enough, may have one or more sheets of tissue paper put in front of the printing frame.

* * *

BASKETT'S REDUCER FOR BROMIDE PRINTS. The usefulness of the Baskett reducer is by no means limited to the reduction of negatives. It may be employed to give a very attractive quality to the surface of a bromide or gaslight photograph—a quality very much like that of a carbon print on smooth transfer paper. Incidentally, also, it acts as a most effective remover of all surface markings, "stress" marks, etc. The reducer, we may point out, is made by mixing two ounces of salad oil, two ounces of terebene, and the contents of a twopenny tin of Globe Polish, and then straining the mixture through two or three folds of cambric into a wide-mouth jar. A little is put on a pad of cotton-wool, and

rubbed gently over the surface of the print until the desired effect is obtained. The print is then wiped with a clean piece of wool, and is given a final wipe with a handkerchief moistened with benzine or petrol.

* * *

VIGNETTING BROMIDE PRINTS.

Those who try to vignette a bromide print in the same way that they would one on P.O.P. will find that the outline of the vignette is much too hard. This is due to the direct lighting adopted for printing. To prevent it, the vignetting mask should be kept well away from the negative, and the direct light screened off entirely, printing by the light reflected from a white card. The exposure required will be much longer than when the direct light is used.

* * *

BROMIDE PRINTING FROM GREAT HURRY. The bromide process is almost invariably employed when the print is wanted in a great hurry, as it often is in press work. There are several ways of printing a negative in bromide without waiting for it to dry. The simplest is to take the negative as it comes from the last washing water, soak the bromide paper in clean water for half a minute or so, and squeegee the two into contact. Surplus water is removed from the back of the paper by a pad of blotting paper, the glass side of the negative is wiped dry, and the exposure made as if negative and paper were both dry. The paper is then stripped off the negative and developed. Another plan is to squeegee a piece of thin celluloid down upon the wet negative, dry the edges and glass side, and then use a piece of dry bromide paper for printing. A third method, and that most frequently used by press photographers, is to put the wet negative in an enlarging lantern and make an enlargement from it; if need be, the "enlargement" may be of the same size or even smaller, if the bull may be allowed to pass. It is important to treat the negative with formalin, or the heat of the lantern may make the wet film run. On the other hand, time is saved in this method, as it may be given the merest rinse after fixing, the complete washing, if done at all, being given after the enlargements are made. It is not safe to squeegee the bromide paper down on a negative which has not been washed quite free from hypo. Prints may be made from negatives before fixing if time is very short, merely washing out the developer; but it is not a method to be recommended.



A CRITICAL CAUSERIE.

By "The Bandit"

Concerning some Photographs by Beginners.

'Critics?—appalled I venture on the name,
Those cut-throat bandits in the path of fame.'—BURNS.

TWO pictures of cottages attracted my attention to-day as I was looking through a batch of prints; one is called "Cottage at Winchelsea," and the other "The Old House, Pool." Technically, No. 2 is better than No. 1, perhaps topographically too, but artistically No. 1 is superior to No. 2. No. 1 is somewhat under-exposed, and although labeled "Cottage" it shows much less cottage than it might do. It might have been taken from straight in front, and the tree dodged better. But the photographer knew the virtue of a little discreet mystery; he knew the wisdom of saying enough but not too much. There is sufficient cottage exhibited to ensure that no one shall make a mistake and think that the photograph represents a cow or a cathedral; at the same time enough cottage is concealed by the tree to make certain that we shall realise that a mere architectural map was not the artist's aim, but rather a rendering of the cottage's snugness, old-world charm, and unadorned simplicity. And the delightful splashes of sunshine, the cool shadows (albeit they are a bit too black), and the total quietude of the scene, all help this final effort of what one might call genuine cottagedom.

Now "The Old House" is a fair enough bit of map-making of its kind. It is clear and sharp and correct. But there is no cottagedom about it; it is more like a "model rural dwelling" at some lath-and-plaster exhibition. Why? Because it is too literal. I grant that there is here no friendly tree to aid in the veiling of superfluous detail; indeed, the subject is gruesomely stark. But at least that row of conscious "we're-being-taken" urchins might have been shunted. They help not at all; they are



The Old House, Pool.

By N. M. G. Herbert.

modern and banal, and painfully rub in the fact that the cottage is a lone survival in the midst of urban restlessness.

Nay, even as a rendering of a survival of old times, the Winchelsea picture attains its end better than the Pool one; the latter states the crude fact of the persistence of this relic in a certain thoroughfare in a certain city—the former states a similar fact clearly enough, but in addition contrives to give us a hint of its gentle charm.

The author of "The Old House" may complain that the difficulties were insuperable, and that no one could have made the subject more pictorial than he has done, except (I think he will concede this) that the figures ought to have been politely induced to absent themselves. But at the very least the lighting might have been more interesting. Suppose, for instance, that the old house were throwing its own quaint shadow on the pavement in front, how much the bareness of the foreground would have been relieved; and, moreover, with that lighting, the detail of the cottage itself would have been subdued without actual loss. Or suppose the photographer had contrived to catch the cottage with a

reasonably old-fashioned cart standing before it; this would have broken the foreground and also provided a liveliness of which the present figures are guiltless.

Here is a picture, "Derby Street, Ormskirk," which shows how a shrewd photographer can manage to make even a quite ordinary street scene look pleasing. He caught it after a snow-storm, when the ugly railings were cushioned white, and when the loaded tree-branches were picked out against a still threatening sky, and behold! he has got a genuinely pleasant snap



Cottage at Winchelsea.

By G. W. Fortescue.

*An Andermatt Exterior.**By Ralph Leach.**Entrance Gates, Gwyn Castle, North Wales. By Harold Robinson.*

out of unpromising materials. Moral, choose your time, as well as your subject and your composition. "Cottage at Winchelsea" might have been as dull as "The Old House" if the former's author had taken it on an overcast day and from straight in front. The sun and the shade save it from being commonplace. So with "Derby Street"—the snow dresses it into daintiness. But poor "Old House"! it has been registered in the most matter-of-fact way conceivable, with the result that it seems more uninspiring than maybe it really is.

The author of "An Andermatt Exterior" has an eye similar to that of the author of the Winchelsea cottage. He has observed that you may convey an impression of the picturesqueness of a building as much by an accessory as by the building itself. The whole story of this Andermatt Exterior is told by the patch of sunshine which creeps in through the gap between the close-packed chalets and makes a pool of placid warmth on the cobbles in front of them. Unconsciously, we gather information from the sunbeam. First, it tells us that the Andermatt homes are built cheek-by-jowl, and that indicates antiquity, for nowadays we claim more elbow room, if not for our houses, at any rate for the traffic which must pass between them. Second, it points

*Derby Street, Ormskirk.*

a finger at the cobbles—another touch of age, another indicator that this place Andermatt is out of the great world.

The entrance gates of a Welsh castle form the subject of the last picture we shall inspect this week. They are peculiarly gloomily rendered; and gloom might be a suitable keynote to strike in rendering a theme of this mediæval type (or pretended mediæval, I suspect). On the ironwork of the gate itself there is a streak of sun, but it is sufficiently insignificant to ignore, though, small as

it is, it lightens the melancholy a trifle.

What is wrong with this picture? Why is it gloomy? Again I must answer—weather. In other words, lighting. However straightforward the subject—a cottage, a gate, a building of some kind, a street—you will do well to study the lighting; and the lighting is largely a matter of weather.

I might also point out that this picture is clumsily composed; it is too full, and top-heavy. The wall on the left is unsupported, and the portal itself has, to my mind, too little foreground underneath it to convey a sense of a firm foundation. A lot of sky could be done without, and foreground added instead to supply stability. Lastly, with a larger stop we should have had a more subtly suggested distance, glimpsed through the arch, than this blunt sharp focusing gives us.

But even these technical items seem to me less important (at least with so comparatively skilful a worker as the producer of this seems to be) than the choice of a seemingly meteorological keynote, to put it a shade grandiosely. A dull subject is bad enough in interesting weather; in uninteresting weather it is horrid. So the duller your subject, the more particular should you be to treat it under helpful conditions of light and shade and atmosphere.



PORTRAIT.

Awarded a Prize of £1 1s. in Class I. in the Marion Competition.

BY NEVILLE AVELING.

Imperial Plates

ORTHO S.S. ORTHO S.R.

H. & D. SPEED 275.

H. & D. SPEED 200.

ORTHO N.F.

H. & D. SPEED 175.

FOR CORRECT RENDERING OF THE BEAUTIFUL

Autumnal Tints.

Imperial P.O.P

UNRIVALLED IN BRILLIANCY, WEALTH OF DETAIL,
AND DELICACY OF TONES.

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	s.	d.		s.	d.
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Single Copy.....	1	4	Single Copy.....	2	4

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 —1d. per word, minimum 9d.

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All advertisements to be inserted on these terms must be accompanied with remittance. To ensure insertion, letters should be posted in time to reach the offices, 20, Tudor Street, E.C., not later than first post on Wednesday.

BOX NUMBERS.—For the convenience of advertisers, letters may be addressed to numbers at the office of the paper. When this is desired, 2d. will be charged for registration, and three stamped and addressed envelopes must be sent for forwarding replies. Only the number will appear in the advertisement. Replies should be addressed: "No. 000, c/o PHOTOGRAPHY AND FOCUS, 20, Tudor Street, London, E.C."

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ADDRESS.—All communications for the Editor should be addressed: The Editor, PHOTOGRAPHY AND FOCUS, 20, Tudor Street, London, E.C.

TO CONTRIBUTORS.—The Editor will be glad to consider original up-to-date manuscripts on photographic subjects. All contributions must be typewritten, or in very legible handwriting, on one side of the paper only, and should bear the name and address of the sender. Letters or communications arising out of matters already appearing in the paper are not paid for. The Editor disclaims legal responsibility for the safety of matter submitted to him, but he will endeavour to return rejected manuscripts, etc., when a stamped addressed envelope is enclosed for that purpose. No notice whatever can be paid to communications without the name and address of the sender, nor necessarily for publication.

PRINTS FOR CRITICISM.—Readers sending prints for criticism or advice are notified that in all cases it is understood that by so doing permission is given for their reproduction, without fee, in PHOTOGRAPHY AND FOCUS.

PRINTS FOR REPRODUCTION.—Reproduction fees are only paid by arrangement beforehand. The sending of a print, without any condition stated, will be taken as permission to reproduce it without fee. The Editor will be glad to consider for publication, with or without letterpress, photographs of special interest, on terms to be arranged.

PAYMENTS.—Articles and illustrations are paid for on acceptance.

INTERVIEWS.—The Editor will be at 20, Tudor Street, on Wednesdays, between the hours of 9.30 and 11.30 a.m., but can only be seen at other times by appointment.



THE BRITISH JOURNAL ALMANAC for 1909, just published, is as portly as ever, and includes within its widely-separated covers all that mass of advertisements which have long made it indispensable to photographers. If we had the heart to complain of so excellent a publication at all—which we have not—it would be at the dilution of the advertisement pages by "literary" matter of any description. It is provoking, when turning up some much-sought announcement—say the prices of the Paget papers—to be confronted by the editor's views on reflex cameras, or by that mass of mathematics which one of the Wellington Street wags regards as a simple method of measuring the focus of a lens. It may be that an epitome of such progress as has found its way into the "B.J." is a necessity for the patient readers of that publication; but for our part we should prefer to have it in the annual index. The advertisements, the plate-makers' formulæ, the list of societies, and the list of firms and telegraphic addresses is invaluable, however, and we are content to take the rough with the smooth. We expect that this almanac, like its predecessors, will be worn out in our service before the 1910 issue comes to take its place at the head of the long procession.

Books for . . . Photographers.

Photography for All.

By W. JEROME HARRISON, F.C.S.
 Covers the whole ground of photography as practised in its most popular forms.
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Practical Slide Making.

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 All the different processes described at first hand by a practical slide maker.
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The Hand Camera and what to do with it.

By W. L. F. WASTELL AND R. CHILD BAYLEY.
 Dealing with modern hand cameras of all types and giving instructions for all forms of photographic work involving the use of a hand camera.
 Cloth Bound 1/- nett. Post free 1/2.

The Platinum Process.

By W. J. WARREN.
 A complete, practical, concise and well written treatise on what is the finest of the printing methods of pure photography, with facsimile developed and undeveloped platinum print.
 Cloth Bound 1/- nett. Post free 1/2.

Photographic Recipes and Formulæ.

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 Over 300 Formulæ, Hints, etc. Reliable and up-to-date.
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ILIFFE & SONS LTD.
 20, TUDOR ST., LONDON, E.C.

"INCOME TAX SIMPLIFIED" is the title of a shilling pamphlet by Arthur Fieldhouse, just published by Simpkin, Marshall, and Co. It should prove a useful guide when filling up those amazing assessment forms from which the patient Briton suffers.

THE GLASGOW SOUTHERN Photographic Association's Exhibition is fixed for January 19th to 30th, 1909, entries closing December 30th. The hon. sec., Mr. Robert Lindsay, of 189, Allison Street, Glasgow, will forward a prospectus in reply to a postcard asking for one.

THE BOLT COURT School of Photo-engraving announces lectures by W. Gamble on "The Albert Etching Machine" on December 10th, and by G. Venner Dear on "The Mark Smith Etching Machine" on December 17th. Admission is free, and the lectures commence at 8 p.m.

EASTMAN KODAK COMPANY OF NEW JERSEY. The usual quarterly dividends of one and a half per cent. (being at the rate of six per cent.) upon the preferred, and of two and a half per cent. (being at the rate of ten per cent.) upon the common stock, will be paid on January 1st, 1909, to stockholders of record on November 30th, 1908.

"THE AMERICAN ANNUAL OF PHOTOGRAPHY" for 1909 has just made its appearance. It is published in this country by Dawbarn and Ward, of 6, Farringdon Avenue, E.C., price 3s. in paper covers, 5s. in cloth. It contains a great many articles, both by British and by American writers, and is fully and well illustrated. A great deal of trouble has evidently been taken in the compilation of the book and in the selection of the articles and illustrations; and as a result we have one of the best of the American annuals of recent years, and one well worth the money charged for it. We reproduce Dr. Power's article from this volume on page 630 this week.

ENLARGING NOTES. Something quite out of the common in the way of a photographic booklet is that which is entitled "Enlarging Notes," just issued by Messrs. Wellington and Ward. Although it is expressly described as being "for use with Wellington papers," twenty-eight out of its thirty-two pages are plain matter of fact information upon enlarging, almost as useful to the amateur who does not use their products as to the one who does. The part which treats of enlarging on gaslight papers is particularly interesting, as the subject is less familiar. But every page contains something of value; in fact, the book forms a brief yet sufficient treatise of enlarging generally, and certainly ought to be in the hands of every one of our readers interested in this topic. There is, moreover, no excuse for not having it, as a postcard sent to Messrs. Wellington and Ward, Elstree, Herts. will bring a copy free of charge. That postcard should be sent forthwith.

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A BARGAIN LIST. Sands, Hunter and Co., of 37, Bedford Street, Strand, London, W.C., send us a lanky list of second-hand apparatus and material of all kinds which they have on sale at greatly reduced prices. A postcard to them will bring a copy, and as it contains many hundreds of items is almost sure to include what the applicant wants. It is a most tempting price list.

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THE BIRMINGHAM PHOTOGRAPHIC SOCIETY'S Exhibition is fixed for February 22nd to March 6th. Very complete arrangements for sending pictures to and from other exhibitions have been made. Full particulars and entry forms for the exhibition can be obtained on application to the honorary secretary, Mr. Lewis Lloyd, Church Road, Moseley, Birmingham.

A GERMAN ANNUAL of established reputation is the "Deutscher Photograph-Kalender," the twenty-eighth issue of which, for 1909, has just come to hand. It is published by Karl Schwier, of Weimar, price 3 marks, in cloth, and contains a great deal of useful information, formulae, tables, etc.

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IN THE MARION COMPETITION, the first prize in Class 1 was taken by Cavendish Morton, the second by E. T. Holding, the third by J. C. Richards, and the fourth by W. McClean. In Class 2, Mrs. St. Maur Thorpe was first, E. M. Harding second, and H. E. Gallo-way third. In Class 3, J. Beaumont was first, C. J. A. Waters second, and S. L. Blear third. In Class 4, H. R. Hurry was first, H. E. Hillyer second, and J. Bruce third. There were also fifteen prizes of £1 1s. and fifteen of 10s. 6d. each.

DEATH OF WILHELM KNAPP. We learn from our Continental contemporaries that Herr Knapp, head of the well-known photographic publishing house of that name at Halle, died on the 24th ult.

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A SALE OF SHOP-SOILED and surplus photographic sundries, at very low prices, is announced by Newman and Guardia, Ltd., of 90 and 92, Shaftesbury Avenue, London, W.

× × × ×

VOICE PHOTOGRAPHY. It is claimed for the apparatus for photographically recording vocal sounds that it will play a large part in future in the training of singers. Dr. Marage, the inventor, points out that it reveals at once defective emission and articulation, and at the same time shows in what way these should be altered.

A Handbook of General and Practical Optics.

THE Orthos Press, of 21, John Street, Bedford Row, London, W.C., has just published, price 10s. 6d., a book entitled "General and Practical Optics," by Lionel Laurance, which has been written to provide a text-book for the general and practical examination of the Worshipful Company of Spectacle Makers.

The work, which in spite of some very deterrent pages of mathematical signs and formulae, is very readable, and deals with its subject in a manner which differs considerably from that of any other text-book of optics with which we are acquainted. Although primarily devoted to that side of optics which deals with spectacles—a side that naturally comes to the front, seeing that the author is one of the recognised authorities upon the subject—there is plenty to interest the photographer, who will learn a great deal about the optics of the apparatus he uses from the book generally

as well as from that part of it which deals with the photographic lens. If he learn nothing else, he will at least familiarise himself with the fact that all lenses, whether belonging to telescopes, microscopes, spectacles, or cameras, are primarily the same, and that, except that some are corrected for certain faults and others for others, they all behave in the same way, and that the way of an ordinary magnifying or diminishing glass. When the amateur has once thoroughly grasped this fact, many of the things on the optical side of photography about which he may have puzzled himself become plain.

Mr. Laurance writes simply and with lucidity. He makes each proposition clear before passing on to the next, and is refreshingly free from those pseudo-scientific affectations, which are the besetting sin of so many who write on optics. We can heartily commend his book.

Merck's New Form of Pyrogallie Acid.

THE well-known firm of chemical manufacturers, Merck of Darmstadt, has long enjoyed a high reputation amongst photographers for the purity and uniformity of its products, so that anything in any way novel put out by it is sure to find a public disposed beforehand to receive it favourably. The latest introduction is a new form of pyro, for which certain advantages are claimed.

Pyro as originally supplied was a snow-like powder, so light and feathery that an ounce filled a bottle holding somewhere near a pint. Hence, when a photographer was advised to pour half a pint of water into a one-ounce pyro bottle he was not asked to perform a miracle, although a writer in one of the American magazines gravely pointed out that there were eight ounces in a pint (American measure), and that, since eight ounces could not possibly be put into a one-ounce bottle, it was a pity photographic instructions were not more reliable. For many years no other form of pyro than these fleecy crystals was known. Then came the compact crystals, with which most photographers are now familiar, in which form an ounce of pyro was not much more bulky than an ounce of carbonate of soda or any other common photographic chemical. Although a good many workers clung to the older form, the compact crystals were preferred by many, not merely because they took up less room, but also because they gave a more colourless solution, and one which kept better.

The new pyro "Merck" is as compact as that just mentioned, but, instead of being in comparatively large crystals, is in the form of a fine white crystalline powder, which is prepared by "a new and improved process." The actual form taken by pyro is, in our opinion, unimportant; what is important is to be able to rely implicitly upon its purity and strength, and that is what may be done to the fullest extent with pyro Merck. We have been using the newer crystals during the last few days, and found them as satisfactory as all the other Merck products of which we have had experience. More than that it is impossible to say.



AMATEUR: "I want some Ozobrome Plaster, please."

UNPHOTOGRAPHIC CHEMIST: "Never heard of it.—What's it for, lumbago?" ("The Australian Photographic Journal.")

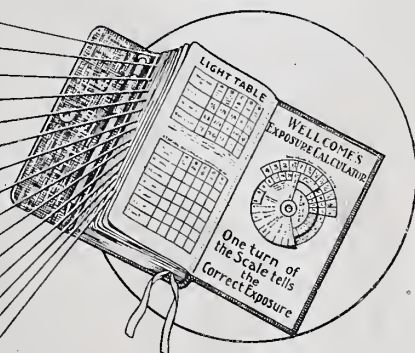
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REPLIES TO CORRESPONDENTS

REGULATIONS.—(1) Envelopes must be marked "Query," and the "Enquiry Coupon" found elsewhere must be enclosed. (2) The full name and address in addition to *nom-de-plume* must be given. (3) Only one question on one subject is allowed in each letter. (4) Prints may be sent

for criticism, but a separate coupon must be sent with each print, and a stamped addressed envelope (not loose stamps) for their return. Queries are dealt with in strict rotation in the order received. Only "Urgent Apparatus" queries will be dealt with by post, for which purpose a stamped envelope must be enclosed.

DAUBHILL (Bolton).—That is what the formula is for.

R. COLVILLE (Hoyland).—The prints are of no use to us. No stamp was enclosed for their return.

H. COLLING (Brighton).—Our contributor asks us to say he is sorry he is unable to do what you request.

F. C. SENNINGTON (Clifton).—We cannot pick out and criticise individual prints from the beginners' competition. See our leaderette last week.

TEABOX (Box) asks where he can obtain P.O.P. on transparent paper for lantern slides and transparencies. A.—No such product is on the market.

J. BRADBURY (Burton-on-Trent).—It is not at all likely that the negative would be purchased by anyone. Criticism is only sent on the conditions given above.

E. A. WATTS (Somerton).—Your description hits the work off to a T. We have destroyed it, as you request, and are sorry your experience has been so unfortunate.

R. CROCKARD (Clydebank).—J. R. Gotz, of 215, Shaftesbury Avenue, London, W.C., supplies ferro-gallic papers, but whether of the brand you name or not we cannot say; we never heard of it.

G. A. NARASIMHAM (Bombay).—All are good makes; we should not like to recommend one in preference to another without knowing far more about your requirements than you have told us.

J. C. SOUTHALE (Willenhall).—The electric light is much to be preferred. A line to J. J. Griffin and Sons, Ltd., Kingsway, London, W.C., will bring you full particulars and prices. We do not reply by post.

REVERSE (Hornsey).—If it is a good negative except for being wrong way round, it can be printed on bromide in an enlarger, reversing the negative to bring it right. Or a print by single transfer carbon will be correct.

H. E. WARDROP, JUN. (Hitchin).—Gaslight is not powerful enough. But a yard or so of magnesium ribbon with a couple of sheets of ground glass (an inch apart and an inch from the negative) interposed would be a basis on which to work.

H. CHAPPEL (Sandgate).—F stands for film and Pl for plate. When using the camera for roll films and focussing by scale the pointer must be brought against the figures in the F column. When using plates the pointer must be brought against the figures in the Pl column.

C.J.F. (Balham).—You have missed what we wrote a fortnight later apparently. *Photography*, February 25th, page 157. All our Autochromes latterly have been developed according to M.M. Lumière's latest instructions, as published in *Photography and Focus* for June 9th this year, page 106.

BROMIDE (Leyland).—It is not a case of more pressure but of uniform pressure. The spots are due to want of contact with the ferrotype. You will have to get a squeegee and use it carefully. We employ a flat one, but a roller seems to be more generally used. Either will do very well.

HAVARD (Aberdare).—The one you mention we should prefer to the other, but with the same lens it costs more than 30s. more. If you are prepared to spend the extra money by all means get it; but if you are compelled to keep down to the sum you name it is wiser to get a simpler pattern with a better lens than a better camera with a cheaper lens.

PHILIP J. WRIGHT (Bexhill).—We invariably use time development for negative work. The Watkins standard developer answers admirably, and is not in the least complicated. The trouble you anticipate does not arise if the water is drawn and stood for an hour or two before use in the room in which it is to be used. The temperature then need not alter a degree in an hour or two.

DOUGLAS (Earl's Court).—"The Complete Photographer," by the editor of *Photography and Focus* (price 10s. 6d. nett, post free 11s.), would be most suitable. As more advanced books the following might be selected: "Instruction in Photography," by Sir W. Abney (7s. 6d. nett, post free 7s. 10d.), and "Science and Practice," by Chapman Jones (5s. nett, post free 5s. 4d.). Our publishers will supply any of these.

G. STREET (Edinburgh).—The f value of the Adon lens for extensions greater than 7 or 8 inches may be taken as twice the extension + 4. With 15 inches extension therefore it would be f/34.5, and with 20 inches f/44.5. You would do well to drop a line to Messrs. Dallmeyer (Denzil Road, Harlesden) for the Adon booklet, which will give you much more information than we could provide in this column. The exposure you name would only be possible under altogether exceptional circumstances.

Q. (Ealing).—Ross Homocentric, Series V., in iris setting. No. 3. 6in. focus, costs £4.

T. W. FORGIE (Rutherglen).—We agree with you; but why add one more if the list is already too long?

HEW (West Kensington).—A card must not be used, and a border printed on the sensitive paper would also disqualify.

C. GREENWOOD (Manchester).—There should be no difference between the keeping properties of film and of glass negatives.

BURROWS MOORE (Brockley).—You were answered on page 595, *Photography and Focus* for Nov. 25th. We do not reply by post.

OLD GOLD (Birmingham).—The liquid gold paint, which can be purchased of artists' colourmen, is thickened by the addition of gum arabic solution until it flows properly from the pen.

BREONG (Catford).—Perhaps Cornellsen, 22, Great Queen Street, London, W.C., might supply it. We do not know anyone else who could. S. Guitermann and Co., 35 and 36, Aldermanbury, London, E.C., are the agents for the American Celluloid Co.

QUID NUNC (Wrexham).—You must have extraordinarily moist fingers for trouble to arise from such a cause; and if so, there is nothing for it but to do the work in gloves. We have tried and find we cannot mark a print that way without actually wetting the fingers.

P. T. SHARPE (N. Perth, West Australia).—Many thanks for the print, which we are sorry we cannot use. The negative needed more exposure; as it is, all the shadows are much about the same tone, and in a reproduction nothing but the sky and the swans would show.

X.Y. (Motherwell).—No. It would not prevent grain from showing. Your best plan, if it is permissible, is to wet the prints and squeegee them face downwards on to clean glass, and photograph them through the glass. But much can be done by illuminating as far as possible from the immediate front.

TOWELS (Bexhill).—Hypo is removed by washing and does not stain. Pyro stains can be partly removed by washing soda and hot water, but if the towels are badly marked there is no cure. A five per cent. solution of potassium metabisulphite will sometimes get rid of them and may be tried if everything else fails.

BOLTER (Chatham).—The card has been returned. The marks are undoubtedly due to oxidised developer. We should advise rinsing between development and fixing, and the addition of a quarter of an ounce of metabisulphite to the fixer. By the way, you state this was hypo 20 ounces, water 4 ounces; but, of course, the figures are reversed.

N. MORRIS (Westminster).—They should be dipped in a two per cent. solution of gelatine and hung up to dry. The gelatine should be just warm, and may be applied with a brush or sponge if this is preferred; but if so, care must be taken to see that there are no air bells or parts of the paper that are left unwetted. Ordinary white gelatine of the oilshops will do.

CYGNUS (Bradford).—Remove the gelatine from both sides by soaking first in cold and then in warm water, and scrubbing. Then dissolve the celluloid in a mixture of equal parts of acetone and amyl acetate until a varnish of suitable consistence is prepared. It will take of the mixed solvents about twenty times the weight of celluloid, but more may be used if preferred.

B. K. TANDAU (Lucknow, India).—The carbonate is presumably at fault; perhaps it was sulphate. We do not recommend the use of any particular formula, except that given by the maker of the plates you employ. Impurities in the developer, especially in hot climates, also prolonged exposure to the red light during development, may produce a positive instead of a negative image.

SEMPER IDEM (Lochee).—Your enquiry is not very clear; but we may say that if the front lens can be used by itself at all, it does not matter whether the extension is obtained with bellows or by lengthening the back of the camera with a box. Provided the plate somehow is at such a distance that the image can be focussed on it the size of that image will be the same, however the extension is obtained.

J. G. GRIFFITHS (Fishguard).—It is doubtful whether the method suggested would give you a result you would like, as there is so much photographing and rephotographing about it. We would suggest that you make a glossy bromide, gaslight, or p.o.p. print of the landscape with the clouds also on it, and that you then entrust it to a good trade firm to have a whole-plate enlarged negative made of it, from which you could make your own prints.

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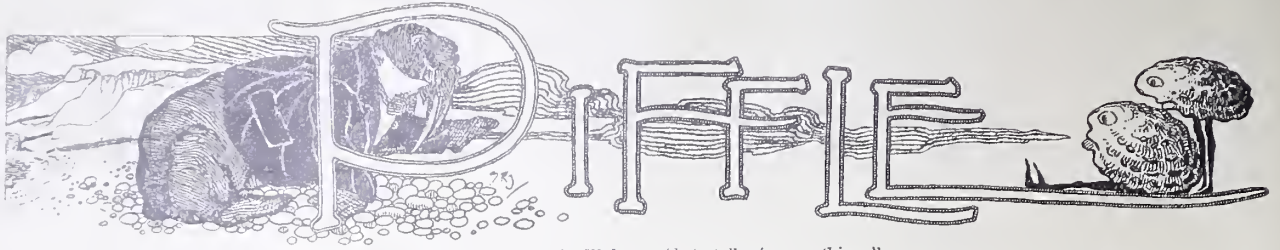
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"The time has come, the Walrus said, to talk of many things."

AS I anticipated, my announcement that I was up to page 300 was promptly followed by a regular snow-storm of letters, postcards, and billets-doux. There was also a supplementary downfall of chocolates upon the curly head of the little dear one to whom I made a passing reference. She made shorter work of the chocolates than I have been able to make of replying to the letters. In some cases a reply was impossible owing to absence or insufficiency of names and addresses; but to all who wrote so kindly I offer my sincere thanks. "Kind friends, your pains are registered where every day I turn the leaf to read them." (Shakespeare or Bacon.)

* * *

Amongst the communications was a very nice epistle from Mr. Adolphe Abrahams, who quite unnecessarily sub-titled himself "The photographer of sport." He suggested that I had never written anything about the sporting branch of photography. I deny the allegation and defy the alligator. There is absolutely nothing bearing upon any branch of photography about which I have not written from paramethoxyquinolineparamethoxyquinolineethylcyaniniodide to a tripod-screw. I learnt about the former from an American journal, and I have got some of the latter myself. But if Adolphe wants a few points about sport photography he can have them here and now, and much good may they do him, or anybody else.

* * *

I have done some sport photography myself; but even if I hadn't I should not hesitate for a moment to write about it. There is, however, one particular branch of sport to which I have never devoted a plate—the sport that consists of the murder of animals and birds by means of guns or dogs. The nearest approach I have made to that is that I have a brother who once fired a rifle at a Chicago meat tin and brought down a neighbouring cow. But like Adolphe I have wasted many a good healthy dry plate on cycle racing, running, jumping, hurdling, rowing, and the like. I should have included golf, but I understand that the language with which it is played fogs most of the plates. As to photographing jumping horses I suppose few amateurs have been oftener alighted upon by equine fliers than the writer of these lines. Hoofs hurt, too.

* * *

There is one point in connection with this kind of photographic work upon which I feel that I easily have the advantage of Adolphe. (You don't mind my calling you Adolphe, do you, Abe?) He says that by practice he has trained himself to see things before they happen. Now don't begin throwing bricks before you know what I mean. You must understand that the proper time to photograph a 100 yards sprint is the exact moment of the breaking of the tape, which, by the way, is not tape at all, but worsted; and darned poor worsted too. If you wait with your camera until the worsted is actually seen to be broken you are too late for your photograph. Before you can fire the shutter the competitors are receiving first aid in the dressing room. You are no good at all at photographing finishes. The expert, like Abe, sees the snapping of the tape with prophetic eye, so that his shutter whangs down just as the thread actually flies. I entirely agree with Ad. in this: I once trained myself down so fine at focal-plane work that I could photograph a hawk-fly on the wing and show his wings at any angle you liked to name, and a hawk-fly's wings go so fast that they are invisible. This is entirely due to what may be termed anticipatory vision. Adolphe states that on one occasion at a race he actually saw the tape broken, made an exposure, and the result showed the tape still intact. This is due to the fault known as ultra-propheticism. He was over-trained.

But where I claim to have the pull over Abe is that I am far more anticipatory than he is. I have photographed the winner of a race before he has started. It doesn't come off every time. You find out who is expected to win a certain race, entice him to a quiet spot, and snap him getting off an imaginary mark or snapping a non-existent tape. To be on the safe side you ought to do this with all the competitors, and you are then certain of your print of the winner for the illustrated papers. I was badly sold at this game once. I had photographed a cyclist who was coloured on the chart as a dead cert for a long race, and as I idly watched him careering round the track I was ticking off in my mind the number of papers to which I could sell a print. All at once my dead cert disappeared over the top of the bank at a sharp turn. I ran over to get an obituary print of him, and met him walking along with what had once been a wheel in his hand. It was the only part of his cycle worth picking up. He didn't win.

* * *

On another small detail I beg to differ with Ad Abe. He contends that in tennis photographs the best results are shown during service, at the moment when the ball meets the racket, when it does meet it. In my experience a far more striking result is obtained just at the moment when the ball meets the eye (either eye will do) of the servee. The attitude of the struck is most picturesque and unusual.

* * *

I don't know whether Adol's experience has been similar to mine in another respect, but if so I am sure he will agree with me that it is most unpleasant for a sports photographer to find himself used as material for providing diversion to a sports crowd. I was once making a set of negatives of some athletic sports, during the progress of which a trick cycle rider in the guise of a tramp was turned on to supply amusement to an empty-headed horde of spectators. His stock joke was to ride into me from behind. I would be chucklingly exposing on some apparitions emerging from barrels of soot and flour in an obstacle race, when I would be made aware of a concussion in my rear guard that sent me hurtling through the air. Until you have actually experienced it you have no idea of the effect of being struck where you are struck by the front wheel of a bicycle when you are bending over the hood of a reflex camera. I got home on the tramp at last by the stratagem of fleeing before him in feigned terror, till by an adroit movement I dropped my tripod through his front wheel and successfully landed him in the water jump. Worse than that, I got a photograph of him in an illustrated paper, and if he only saw it I was amply avenged.

* * *

So you see, Abe my boy, you are not the only "photographer of sport." I have been there myself. But, unlike yourself, I have had the grace to reform. THE WALRUS.

SUBSCRIPTIONS.

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PHOTOGRAPHY

A JOURNAL FOR EVERY CAMERA USER.

EDITED BY R. CHILD BAYLEY.

PUBLISHED WEEKLY.

DECEMBER 15TH, 1908. TUESDAY. No. 1,049. Vol. XXVI.

Special Subject of this Number. SLIDE MAKING.





EDITORIAL

About Christmas Cards.

With the near approach of Christmas, a great many of the readers of *Photography and Focus* will be busy preparing their Christmas cards. We should like to remind them of the competition which we have now open for the best photographic Christmas card. It should be a simple matter to do one card extra and send it in to the competition, the rules for which will be found on page 649. If every reader who is making his own cards this Christmas were to do that, we should have a record entry.

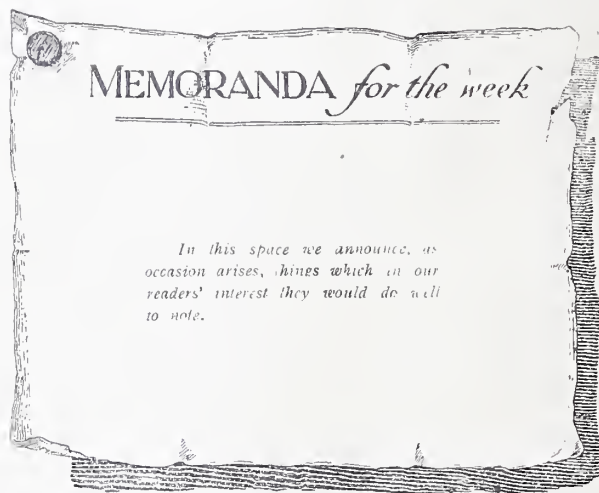
Slide Making and Slide Showing.

It is to be hoped that the large space which we have given up in this issue to the subject of slide making will have the result of leading many more of our readers to take up that particular branch of photography. Slide making is not only a very fascinating occupation, but it has an excellent effect upon the quality of one's other photographic work. If we look round amongst the photographers of our acquaintance we find, almost without exception, that those who are slide makers are also the best workers in other branches. It is not difficult to make a good slide; but the knowledge that whenever it is to be seen it will be looked at under a powerful microscope—for that is what projecting it on the screen comes to—leads the

maker to be constantly on the look out to guard against trifling blemishes of all kinds. The extreme difficulty of spotting the picture on a lantern slide compels one to be very careful not to get pinholes, such as are caused by dust on the negative. Parts of a slide can hardly be sunned down in the way so often done with a print; so that the original negative must have its density right if it is to make a good slide. Unnecessary details cannot be stippled out, or converted into something else on the slide. Lastly, the development of the slide must not be "played with" or its colour will be adversely affected. From this it will be seen that the ability to make a good slide is a fine test of the technical skill of the photographer, and at the same time the making of slides is excellent practice in accuracy, care, neatness, and cleanliness—virtues which in these days of perfect plates and perfect papers lie at the root of all successful photography.

Many photographers are deterred from slide making from not possessing a lantern in which to test their slides and by which they can show their results to their

friends. We have often pointed out in these columns how very simply and at what little cost an arrangement for showing slides on a small scale can be fixed up. A condenser to cover a lantern slide is not very costly, while a good f/6 quarter-plate lens makes an excellent lantern objective. The illuminant may be incandescent gas for those who have a gas supply, or acetylene for those who have not. Under these circumstances, provided the size of the disc does not exceed three feet in diameter—a size that is ample for a show to a few people at home—the illumination will be all that can be required. The points to receive attention should be, first, that the screen is quite white and opaque—white paper mounted on a board does very well in the absence of a whitewashed wall—and, second, that no stray light from the lantern should be allowed to get out into the room. More lantern shows are spoiled from this cause than from any other.



Impossible Photography.

The light, not in London only, but right out in the country, has been very poor lately; so bad, in fact, that hand camera work, except under very favourable conditions, has been out of the question. The cheaper forms of hand camera, with a single lens and one speed shutter, are of no use at all at this time of year, unless they are put on a stand and time exposures are given, either by providing the lens with a cap and fixing open the shutter, or by

making the camera immovable in some way or other, and giving a number of shutter exposures on the same subject on the one plate.

Although this last is not a procedure to be recommended when the other can be adopted, with a little care it is perfectly feasible so long as the subject itself does not move. Even when the shutter can be slowed down very much, there may still be trouble. Only last week, we found that at 11 a.m. a landscape subject required $\frac{1}{4}$ s. at f/8, using one of the fastest roll films on the market; and those who have tried it will know that a hand camera exposure of a quarter of a second calls for a very steady hand indeed. The great thing is to recognise the fact that, while photography itself can be practised all the year round, hand camera work, save under very exceptional conditions, is not practicable in the middle of winter. The conditions would include a snow fall and frost pictures, very open subjects, or else a very rapid lens and a comparatively slow speed of shutter coupled with the ability to hold the camera still.

A New Printing Process.

The new printing paper, "Ensyna," which is reviewed elsewhere in this issue, presents a number of very interesting features both to the beginner and the expert. The beginner will rejoice to learn that the exposure problem is largely done away with, since, provided he takes care not to under-expose, he can give almost as long as he likes and still get a good print without any modification of the developer. He will find that he can get a warm tone, practically a P.O.P. colour, by simple straightforward development, and, above all, that half a minute in hypo, followed by two minutes in running water, will give him a print which there are good *a priori* grounds for believing to be permanent. The expert will appreciate a paper the fixing of which can actually be watched, and one which contains no silver haloid at all. He will realise that in "Ensyna" he has a paper in which, for the first time, it is possible to develop the image physically, building up the picture on the surface, and not merely developing it in the body of the emulsion.

The straightforward development of "Ensyna" is so simple and easy that a certain number of photographers will no doubt be looking round for varia-

tions from the maker's instructions. There is a type of amateur who finds his amusement, not in the production of good prints on simple lines, but in the departures he can make from the orthodox course. It is this type which tries to get warm colours on bromide paper or seeks for a toning bath to give a pure black with P.O.P. For his benefit let us give him a couple of hints about "Ensyna"—hints that are not to be found in the maker's instructions. Instead of the preliminary washing in water, let him use water which has been coloured just a faint yellow by the addition of a little solution of potassium bichromate. Let him take the print straight out of this, without washing, and place it in the Ensynoid developer. If the exposure has not been too short, he will get a print of a fine blue-black tone, quite different from the warm tones to be got by following the instructions strictly. On the other hand, let him give a full exposure and add a little of a solution of alum to the developer, and the result is a fine Bartolozzi red. The only risk of failure with the new paper lies in assuming that, because it can be worked by gaslight, it is simply a little different "gaslight" paper. It must be borne in mind that it is not, and that the developers used with ordinary bromide and gaslight papers are of no use for it.

THE WEEK'S MEETINGS.

MONDAY, DECEMBER 14TH.

Cleveland C.C. "Velox Paper." W. F. Slater.
Scarborough & D.P.S. "Pictorial Slides and Prints." H. & C. E. Wanless.
Southampton C.C. "The Flower World." E. Seymour.
Bjwies Park & D.P.S. "Photographic Lenses." Dr. A. R. F. Evershed.
Bradford P.S. "Lantern Slide Making." F. Nicholson.
Northampton N.H.S. & F.C. "Enlarging." R. and H. Chapman.
Bedford C.C. "The Oil Process." Basil Schön.
Preston C.C. "English Architecture." W. Cowperthwaite.
Lancaster P.S. "Making, Mounting, and Binding of Lantern Slides."
Handsworth P.S. Conversations.
Walsall P.S. "An Artist's Views on the Subject." R. R. Carter.

TUESDAY, DECEMBER 15TH.

Birmingham P.S. "Oil Printing." J. Gale.
Epsom & D. Lit. & Scien. S. "Architectural Photography." H. W. Bennett.
St. Helen's C.C. "Lancs. and Cheshire Union Lantern Slides."
Wimbledon & D.C.C. "Lantern Slide Making."
Darlington C.C. "Velox Paper." W. F. Slater.
Chiswick C.C. "Lantern Lecturettes." Members.
Forest Gate C.C. "Gaslight Papers." A. Brooker.
Blackpool & Fylde P.S. "Lantern Slide Making." T. Rhodes.
U. Stereoscopic S. "Summer Competition."
Sheffield P.S. "The Taming of Garden Birds and Squirrels." Rev. B. Butler.
Leeds P.S. "The Elements of Architectural Photography." J. R. Wigfull.
Otley & D.C. & Art S. "A Scamper on the Continent." J. Learoyd.
Monklands P.S. "Practical Developing," etc. Members.
Keighley & D.P.A. "Colouring Lantern Slides." F. E. Fearnside.
Nelson C.C. "Lantern Slides." W. Baldwin.
Worthing C.C. "Carbon." Richard Long.
Hackney P.S. Members' Annual Sale.
Hanley P.S. Trimming and Mounting Competition.
Blackburn & D.C.C. "Photography in Natural Colours." F. Higginbottom.
Padiham P.S. "Boarded Photography." A. Dalton.
Slough P.S. "The History and Mystery of Burnham Beeches." H. Townley.
Liberal Border City C.C. "Holiday Rambles with a P.C." R. S. E. Douglas.
Doncaster C.C. "A Holiday in Paris." H. Waterton.
Preston Scien. S. "Photographs and Pictures." G. J. Gibbs.
Manchester A.P.S. Photography of Marine Life.
Stanford-le-Hope P.S. Photography and Focus Prize Slides.

WEDNESDAY, DECEMBER 16TH.

Borough Poly. P.S. Second Lantern Slide Competition.
Sheffield Friends' P.S. Wellington & Ward's Specialities. H. Wade.
Wolverhampton P.S. "The Camera as an Aid to Natural Studies." H. Hancock.
Dudley & D.C.C. "Velox Paper." W. F. Slater.
Huddersfield N. & P.S. Trip in Mediterranean by two ladies. Mrs. A.W. Whiteley.
G.E.R. Mech. Inst. Members' Mounting Competition.
Glasgow Southern P.A. Visit to Dennistoun A.P.A.
Rochdale A.P.S. "The Evolutions of an Amateur Photographer." W. Brunt.
Wimbledon Park P.S. "Transparencies." H. Wilkie.
Chorley P.S. "The Latest Ozobrome Process." T. H. Greenall.
Isle of Thanet P.S. "Enlarged Negative Making." J. P. W. Goodwin.
Sale P.S. Preston Portfolios.
Leeds C.C. "Leeds in the Olden Days." Alf. Mattison.
North Middlesex P.S. "Elementary Optics." H. Stuart.
Woodford P.S. "Bromoil." W. L. F. Wastell.
Bristol C.C. "The Environs of Bristol." W. F. Kuner.

WEDNESDAY, DECEMBER 16TH (continued).

South Suburban P.S. "The Best Way for Beginners."
Croydon C.C. "X Ray Work." C. E. K. Mees and W. H. Smith.

THURSDAY, DECEMBER 17TH.

Hull P.S. "Yesterday v. To-day." Burroughs, Wellcome & Co.
Southend-on-Sea. Exhibition of Competition Prints.
Heaton & D.C.C. Printing and Developing Competition.
Ilford P.S. Slide Competition.
Wembley & Sudbury C.C. Intensification and Reduction.
Jarrow Mechanics' Inst. C.C. "Velox Paper." W. F. Slater.
Armey & Wortley P.S. "An Evening with Pictures." W. Bagshaw.
Batley & D.P.S. Special General Meeting.
Liverpool A.P.A. Smacking Social.
Millothian P.A. Oil and Gum. T. A. Knoblauch and R. Thomson.
Leek P.S. "A Scamper in Holland." Neeland S. Coy.
Dublin C.C. "Carbon Printing." W. Ebbs.
Baling P.S. "Insect Photography." Dr. Akermann.
Small Heath P.S. Members' Lantern Night.
Richmond C.C. "Mounting and Framing Prints." J. D. Gibson.
Weybridge & D.P.S. "Carbon Printing." Autotype Co.
Bolton A.P.S. "Thornton-Pickard Prize Slides." R. Hesketh.
Bolt Court School. "The Mark-Smith Etching Machine." G. Venner.
Handsworth P.S. "Agfa Chemicals and their Application." F. C. Hart.
L. & P.A. "The Dauphine District of S. France." S. E. Fincham.
Darwen P.A. "Yesterday and To-day." Burroughs, Wellcome & Co.
Workop P.S. Photography and Focus Prize Slides.

FRIDAY, DECEMBER 18TH.

Sutton P.C. "The Movements of the Camera." C. T. Twaites.
Oliver Goldsmith P.S. "Enlarged Negatives." A. H. Butterworth.
Redcar P.S. "Velox Paper." W. F. Slater.
Colne C.C. "Camera Subjects and their Treatment."
Lincoln A.P.S. Social.
Bromley C.C. Affiliation Prize Slides.
Acton & Chiswick P.C. Members' Lantern Evening.

SATURDAY, DECEMBER 19TH.

Ashington & District C.C. (Morpetb). Photography and Focus Prize Slides.

MONDAY, DECEMBER 21ST.

Walthamstow P.S. "The Combined Bath." F. D. Hunt.
Scarborough & D.P.S. "Velox Papers." W. F. Slater.
Stafford P.S. "Midland Photographic Federation Portfolio."
Dewsbury P.S. "Thornton-Pickard Prize Slides." R. Hesketh.
Southampton C.C. "Bromoil Process." C. H. Hewitt.
U. Stereoscopic S. "Excursion" Competition.
Ca'ford & Forest Hill P.S. Print and Lantern Slide Competitions.
South London P.S. Excursion and Lantern Slide Competitions.
Leek P.S. Prize Slides.
Cleveland C.C. Photography and Focus Prize Slides.
Kidderminster & D.P.S. "Pictures with the Goetz Lens."
Glasgow & W. of S. A.P.A. "Photography as a Means of Artistic Expression."
J. Craig Annan.
Lancaster P.S. "Picturesque North Wales." H. Gaythorpe.
Walsall P.S. "Some Photographic Chemicals." W. B. Shaw.
Cleveland C.C. (Middlesbrough). Photography and Focus Prize Slides.

Under-exposure.

How best to deal with it; so as to get as good a print as possible from a much under-exposed plate.

THE under-exposed plate, like the poor, is always with us. An editorial note which appeared recently in *Photography and Focus*, drew attention to the fault as the prevailing one in a large competition; and the mere fact that the great majority of amateur photographers use hand cameras, and use them often under conditions which absolutely guarantee under-exposure, shows that the problem of dealing with a badly under-exposed plate is one which is of importance to a very great number of workers.

The old fashioned idea that something could be done during development to remedy under-exposure has long since been exploded. It is recognised by all the leading authorities to-day that there is *no* remedy in development for an under-exposed plate. It can be made worse by

improper development, but it cannot be made better. And it is made worse by the very procedure which some workers adopt as a remedy. They keep on adding alkali to the developer, hoping against hope that they will "bring out detail in the shadows"—detail which the exposure has been too short to register. The result is that by the time they give up the development in despair the plate is altogether over-developed.

Now over-development is the worst possible treatment of under-exposure.

This statement is sufficiently important to be put in a paragraph by itself. By over-developing the photographer puts it out of his power to remedy to some extent by after-processes the defects which the under-exposure has produced. This will be readily understood when the result of under-exposure is considered. If we take a negative which has been under-exposed and examine it, we shall find that it is characterised by insufficient contrast in the details in the darker parts of the subject. In very bad under-exposure the details are so lacking in contrast as to be invisible; and we say that the negative has "clear glass shadows," though this is usually an exaggeration. But in negatives which are not so badly under-exposed as to be quite incurable the details are there, but are too faint to print. What we want to do, therefore, is to increase their contrasts so that the exposure in printing to get the details in the highest lights is not so long that these shadow details are obliterated. When we go on developing an under-exposed negative in the hope of "bringing out detail"—meaning thereby in the hope of making detail visible during development—we are doing the worst thing possible. We are piling up density in the high lights, so necessitating more contrast in the shadows. Yet contrast in the shadows is exactly what under-exposure does not give.



An Open Door

By J. Stanley-German.

Therefore, instead of pushing on development, the proper thing to do with an under-exposed plate is to stop development while one is quite sure that the development is too little rather than too much; to stop it, at least, when the plate has had no more development than it would have received in the ordinary course had it been correctly exposed, and to rely on an after-process to give the required contrast in the shadows.

A digression may be made here to point out that the ordinary textbook statement that "under-exposure gives harsh contrasts" is in error. Anyone who exposes two plates on the same subject, one for the correct time and one for very much less, and then develops the two side by side in the same dish and for the same time, will find that, so far from the under-exposed plate having harsher contrasts than the other, it has much less contrast. The excessive contrast associated with under-exposure is due in all cases to over-development in the hope of remedying the under-exposure. If the correctly exposed plate is also over-developed in the same dish and at the same time, its contrasts will still be found greater than those of the under-exposed plate. These are experiments which anyone who doubts can easily perform for himself. The matter is only mentioned to prevent misunderstanding.

The under-exposed negative we will suppose to be well washed and dried. It is then ready for intensification. All processes that intensify are not suitable, as it is manifest that we want one which will give as much contrast as possible to the shadow details without giving too much density to the high lights. The ordinary mercury-ammonia method is one of the best under these circumstances. The negative is placed in a saturated solution of mercuric chloride until it is whitened right through. It is well to add five minims of hydrochloric acid to each ounce of the mercury solution. The bleached negative is then washed in water to which a little hydrochloric acid has been added. One dram to ten ounces is ample. After three or four washings in this, each of three minutes duration, it receives a similar amount of washing in plain water. It is then placed in one dram of strong ammonia diluted with five ounces of water, and when the blackening has gone right through it is taken out, washed in several changes of water or in running water for ten minutes, and dried.

This treatment will be found to make a great improvement in the quality of the print which the negative will yield, and for those who like a simple

and direct method of dealing with under-exposed plates it is the best. But by taking a little trouble a result can be got which is distinctly superior to anything which the straightforward application of the intensifier will bring about.

The negative is bleached exactly as just described, except that the bleaching is stopped as soon as the shadow parts are bleached through. The high lights, when the glass side of the negative is examined, will still look quite black in colour, showing that the action of the mercury has not extended throughout the deposit there. The negative is then washed as above. As the bleaching action of the mercury goes on to some extent during the washing, it is well to stop the bleaching a little before it seems to have reached the correct stage. After washing, the image is blackened by being immersed in a mixture made by pouring one part of a saturated solution of ferrous sulphate into five parts of a saturated solution of potassium oxalate. The oxalate must not be added to the ferrous sulphate, but *vice versa*. In this liquid the picture blackens much more slowly than it does in ammonia, usually taking five or ten minutes to complete. The plate is then given three changes in very dilute citric acid (ten grains of acid in five ounces of water is strong enough), and is finally washed under the tap for ten minutes.

The method just described will be found to increase the contrasts of the shadow details much more than it increases those of the high lights, which is exactly what we want. It also has this great advantage over intensification with mercury and ammonia, that if the first application of the intensifier does not prove to be enough, the negative, after being washed and dried, may be submitted to a repetition of the process, and, indeed, to as many repetitions as may appear to be required, only it is essential to dry the plate between each, and to put the dry negative direct into the bleaching bath without any preliminary soaking in water. It is also well to take a trial print before repeating the operation to ascertain whether the intensification has gone far enough. Over-intensification is as great a mistake as over-development.

In one of these ways, then, can an under-exposed result be improved. Nothing will make it as good as it might have been with correct exposure, but at least it may be made to give a far better print than it would have done had the usual textbook method of trying to remedy the under-exposure in the development been adopted.

A Christmas Card Competition. Rules and Prizes.

WE offer a signed copy of "The Complete Photographer," the half-guinea work by the Editor of *Photography and Focus*, now in its second edition, to the sender of the best photographic Christmas or New Year card. The sender of the second best will be allowed to select photographic books to the value of five shillings from Messrs. Iliffe and Sons' list; and the sender of the third best, books to the value of half a crown.

The cards must be either wholly or in part photographic; the photographic part must be the work of the sender; commercial Christmas card mounts or sensitised cards may be used, but the extent of the competitor's own work in the finished card will carry weight in making the awards.

Each competitor may send in any number of cards, but each card must be posted separately, and each must bear the name and address of the sender.

The copyright of all cards, winning and otherwise, will remain the property of the competitors, but the publishers of *Photography and Focus* shall have the right to reproduce in that paper, without payment, any of the cards sent in.

No cards can be returned or criticised, nor can correspondence be entered into concerning the competition.

All cards must be addressed, "The Editor of *Photography and Focus*, 20, Tudor Street, London, E.C.," and must be distinctly marked on the outside, "Christmas Card Competition." They must be sent by post, and must reach Tudor Street by the first post on Thursday morning, December 24th. Competitors are reminded that postal delays are to be expected near Christmas, so that ample time should be allowed, as no extension can be granted. All packets arriving with excess postage to pay are refused, so that care should be taken to see that the postage is fully paid.



REPLIES TO CORRESPONDENTS.



Queries are dealt with in strict rotation in the order received. Only "Urgent Apparatus" queries will be dealt with by post, for which purpose a stamped envelope must be enclosed.

REGULATIONS.—(1) Envelopes must be marked "Query" and the "Enquiry Coupon" found elsewhere must be enclosed. (2) The full name and address in addition to a *nom-de-plume* must be given. (3) Only one question on one subject is allowed in each letter. (4) Prints may be sent for criticism, but a separate coupon must be sent with each print, and a stamped addressed envelope (not loose stamps) for their return.

O.B.A. (Kensington).—The development factor is 18.

B. R. OMOIL (Wood Green).—We cannot trace the formula to which you refer.

H. U. KNIGHT (Southsea).—We have asked our advertisement department to look into the matter.

N. G. EADES (Northfield).—Your letter is to hand; but we have no recollection of the incident.

MISS F. J. AMERY (Bath).—The results of the Kentmere competition have not yet been published.

W. G. NORMAN (Bristol).—We are unable to reply by post. The best plan would be that given on page 132 of the Photographic Reference Book (1s. 6d. nett, or post free from our publishers 1s. 9d.).

J.S. (Middlesbrough).—Clearly the developer has been allowed to oxidise in the cards. If acid hypo is used, and the cards are rinsed before being put into it, and kept moving while in the hypo, there will be no trouble.

H. D. BECK (King William's Town, Cape Colony).—The coupon of the latest issue to come to hand when the prints are being sent off is sufficient. We are constantly pointing this out, but you appear to have overlooked it.

MELBOURNE (West End Lane).—We have looked very closely at the original print, but can see no signs of "faking," and do not think that there is anything in the picture for which the low source of light does not adequately account.

CONSTANT READER (Elgin Avenue).—The best method is that described on page 132 of the Photographic Reference Book (price 1s. 6d. nett, or post free from our publishers 1s. 9d.). The description of the process is too long for this column.

BWILDERED (Dublin).—"The Hand Camera," by Wastell and Bayley (price 1s. nett, or post free from our publishers 1s. 2d.), answers questions 1 and 3. To question No. 2 we answer "yes." Please read the rules above before making an enquiry.

H.R.H. (Bristol).—Your supposition is quite correct. Provided the slit is not reduced in width so much that slight irregularities in its edges become important, it is preferable to control exposures with the slit rather than with the spring.

IMPRIMATUR (Shoreditch).—A. B. Allen, of 20, Endell Street, London, W.C., would undertake to do it, no doubt; but it would probably cost more to alter than you could buy a new plate camera for. It does not lend itself to alteration at all well.

SCOT (Handsworth).—There is no book or article on the subject, but there is a good deal of information scattered through our back volumes. Any specific enquiry put to us we shall be glad to answer, but please be more definite than "in the Tropics."

GELATINE (Stretford).—The glass must first be coated with enamel collodion and dried. The glass and print must be immersed in the gelatine solution, and the two brought into contact underneath the surface of the liquid. Your other proceedings are correct.

CANTA FIERO (London).—If you have accepted payment or otherwise agreed to the terms named, you have parted with your rights in them. If you merely sent them in and they were used in the ordinary course without any stipulation, you can sell copies to other papers.

CAMERA (Oxted).—If the box is big enough it can be made to answer by interposing between the lamp and the negative two sheets of finely ground glass. They must be at least an inch apart, and at least an inch away from the negative. The exposure will be prolonged, but the illumination will be fairly even.

J. D. PLEWES PERRY (Leyton).—You cannot buy a lens for such a camera by its focal length, but must give the lens manufacturer the dimension you give us, and ask him to supply a lens to suit. There is no definite relationship between the focus of a lens and the distance between the ground glass and the lens flange.

M. A. DIENER (St. James's Park).—If you are quite sure of your measurements we should send the lens back to the maker to be put right. We presume that you have taken the "effective" aperture, and are not merely measuring the visible opening in the stop. We mention this because it needs special appliances to measure the aperture of stops with as much accuracy as your letter implies.

F. ASHBURY (Tamworth).—The subject of the picture is certainly not one to come under the head of animals, and were we holding the competition we should disqualify it on that ground, and not "because of the figure." It is not a question whether animals do or do not figure in the picture, but whether they figure in it *as animals* with sufficient emphasis to form its subject. In our opinion they do not, though we can quite imagine the same group to be so photographed as to be eligible.

W. and A.T. (Edinburgh).—Fallowfield, 146, Charing Cross Road, London, W.C.; W. Tylar, High Street, Aston, Birmingham.

DESIDERATUM (Lowestoft).—The makers are Woolley, Sons, and Co., Ltd., of Victoria Bridge, Manchester. We should try them.

TRIPOD (Clapham).—Certainly not, as when the enlarger is in use the camera cannot be employed for ordinary work. There is no other drawback, however.

DICK (Limerick).—"Practical Retouching" by Drinkwater Butt (price 1s. nett, or post free from our publishers 1s. 2d.) is what is most likely to be helpful.

DUSTY (Warwick).—It is not easy to see what you mean by "a formula." The usual method is to squeegee the prints to ferro-type or pulp boards, and to strip them off when dry.

SPRAT (Leiston).—"Who Discovered Photography?" is the title of one of the Photo Miniature series which might help you. They sell at 6d. each. Dawbarn and Ward publish them.

F. R. GRIME (Morecambe).—Your letter has been handed to our advertisement department for attention; but we think you would do well to wait a little longer before taking any further steps.

P.T. (Soho).—There is no question in your letter. Please get someone to look through your enquiries before you send them off to us. We want to help, but cannot guess what it is that you want to know.

G. S. JENNINGS (Forest Gate).—Many thanks for your suggestions, but they cannot be adopted. The problem is by no means so simple as it seems.

PINHOLE (Dyce).—Certainly you could; and although stopping down a little might alter the focus somewhat: when stopped down to the pinhole size or near it, you would get a sharper picture with the lens than with the pinhole by itself.

NORVICENSAN (Norwich).—You are quite correct, there is an emanation from the aluminium. Either shutters of some other material must be substituted, such as vulcanite; or the slides must be so arranged that the aluminium is not scratched. Would it not be possible to file the clips down just a trifle so as to clear it? The matter is one for the makers of the camera.

T. CLARKE (Bridgwater).—This column cannot be used for giving "hints," but only for replies to specific enquiries. Your best plan will be to work with an exposure meter. If you get the Watkins Manual (price 1s. nett, or post free from our publishers 1s. 3d.) and read it carefully, we believe you will think the advice to buy it the best bit of help that *Photography and Focus* has ever given you.

T. OWENS (Taunton).—A focal-plane shutter is one which works near the "focal-plane," that is to say, close in front of the lens. A roller blind shutter is one in which an opaque-blind with an opening in it travels from one roller to another, allowing the light to reach the plate while the opening passes across. All focal-plane shutters are on the roller blind principle; but many roller blind shutters are not focal-plane shutters.

W. BLITERS (Beverley).—We congratulate you on having met with such success in your efforts to sell your work. The word is only added as a warning to other papers not to reproduce without permission. The copyright remains with you if you made no stipulation to the contrary. You would do well to consult the article in this issue, and the copyright article in *Photography and Focus* for June 16th, 1908, which you seem to have overlooked.

KAMRA (Rockhampton).—There is nothing that can be done to them with the faintest hope of success. Plates to be developed after fixing must be exposed for much longer than ordinarily. The developer is the Wellington silver-cyanide intensifier, which then will gradually build up an image. There would be no harm in trying: the directions for making up and using the intensifier are given in full in Bennett's "Intensification and Reduction" (price 1s. nett, or post free from our publishers 1s. 2d.). We cannot think that anything could come of it.

G. STREET (Edinburgh).—Development strictly by time gives the best results when the exposures may be right or wrong, whether the errors are over-exposure, under-exposure, or both. Factorial development gives an equally good result when the exposures are correct; but if strictly applied to cases of over-exposure leads to under-development, and with under-exposure to over-development. We therefore prefer time development. We do not recommend "tank development" as such, as it is often misused by employing very dilute developers for a long time; but if a developer is used which acts fully in half an hour or less, "tank development" is an excellent way of working "time development."

A. H. HALL (Waltham Cross).—Many thanks for your letter and for the interesting enclosures.

C.J.F. (Balham).—Thanks for your letter. We cannot help thinking that under-exposure was the cause of the excessive density in the Autochrome.

LEENDA'B (Ealing).—Percy Lund, Humphries, and Co., The Country Press, Bradford, and H. Lindenmeyr and Sons, 11, Upper Thames Street, London, E.C., both supply it.

TOMMY (Royston).—It is not easy to understand the trouble; but if the glass does bend we should use plate glass. It can be obtained from A. Goslett and Co., 127, Charing Cross Road, London, W.C.

W. J. CORKE (Maidstone).—No prints were enclosed.

MIDGE (Penarth).—We have not got the information by us, but a line to Messrs. Mawson and Swan, Newcastle-on-Tyne, would bring it.

B. E. JACOBS (Stowmarket).—The makers were the Rochester Camera Co., Rochester, U.S.A. You could not buy parts in this country, and would have to get it repaired as best you can.

J. P. DEVINE (Derry).—So far as we know there is none. Fallowfield, 146, Charing Cross Road, London, W.C., sells a book on the subject, price 6d., which gives the fullest working particulars. We cannot answer enquiries by post.

The Standa Developing Tank for Roll Films.

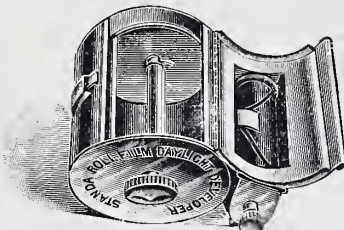
ANYTHING which tends to popularise time development, and so to replace rule of thumb by sound intelligent method, is sure of a hearty welcome from the readers of *Photography and Focus*. The rapid growth in systematic development is the most noteworthy feature of modern photographic practice; and daylight developing machines, which do away with all necessity for a dark room, have played the most important part in the change.

The Standa apparatus for developing plates is well known. Unfortunately, all machines for developing plates require the use of a dark room—at least for the purpose of loading the plates into the machine. It is not the least of the merits of roll film that it not only lends itself to the daylight loading system as far as the camera is concerned, but that the film can in the same way be loaded into a developing machine, also in daylight. So that the dark room is no longer a necessity at all. The Standa roll film daylight developing tank therefore has that advantage over the Standa plate developer. We have been using this piece of apparatus lately with much success. Every exposure on the lengths of film which we operated in the machine was turned into a capital negative, evenly and properly developed, with no perceptible defects of any kind whatever that could be attributed to the apparatus. We had not the advantage of a demonstration of the machine, but simply used it on the lines laid down in the printed instructions.

The apparatus, which is remarkably compact, is made of nickel-plated metal. It consists of two parts—the inner vessel, which is fitted with a detachable spool box and an apron, and an outer tank, which holds the developing liquid, and into which the other vessel is lowered. The detachable spool box is the most striking feature of the apparatus, as it is this which allows the whole thing to be so extraordinarily compact. It will be seen in our illustration with a spool inside it; the curved metal plate to which it is attached being the door of the inner vessel, shown open in the block.

To use the machine, the spool is inserted in the spool

holder, and the end of the black paper is wound on to the spindle which can be seen passing through the centre of the vessel. The apron, which is not shown in this illustration, is quite opaque. The end of it is passed through a light-trapped passage and is also hooked on to the spindle. The door of the vessel is then closed and fastened, and the knob at one end is turned. This winds the apron and the film into the machine, and when the apron has all been wound in and is felt to be turning freely, the spool box, containing the now empty spool, is slipped off. There is no fear of fogging the film in so doing, as the apron itself closes the opening formed by the removal of the spool



box, and the film is perfectly protected from light. All that remains to be done is gently to lower the vessel containing it into the tank of developer, to take it out and reverse it once or twice during the progress of development, and then to change the developer for water, and thus give the developed film a washing. It may then be fixed in the tank, or it may be taken out in daylight without harm, if it has been well washed, and be fixed in a dish of hypo in the ordinary way.

The price of the Standa tank for Ticker films is 10s. 6d., for films 2½ in. wide or under 16s., 3½ in. 21s., 4½ in. 26s., 5 in. 30s., and 7 in. 35s. These are for six exposure spools. Tanks for ten or twelve exposure spools are made to order only at prices one-third higher than these.

Those who are interested in getting the best possible result from their roll film exposures would do well to write Standa, Ltd., of 3, Cherry Tree Court, Aldersgate Street, London, E.C., for full particulars of the apparatus.

The Ewon Arc Lamp for the Lantern and Kinematograph.

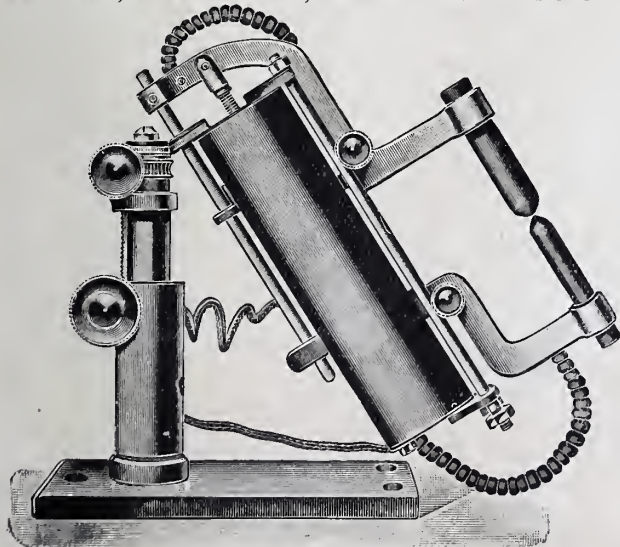
NOW that the supply of electric current is so very general, there is an increasing demand for an arc lamp for lantern use, since in power, in purity and whiteness of light, and in concentration, the electric arc, as is well-known, leaves all other forms of illu-

mination behind. Even the mixed jet at its best will not compare with the arc, and the superiority of the latter becomes more manifest than ever, when Autochrome or other colour slides are in the lantern.

The Ewon arc lamp, of which we give an illustration this week, is one which is being put on the British market by Messrs. A. E. Staley and Co., of 19, Thavies Inn, London, E.C. It is entirely automatic, requiring no attention beyond switching on the current, until fresh carbons are needed, and the position of the arc remains central all the time. Lanternists who have worked with a hand-feed lamp, or have experience of the rate at which a lime will pit and waste under the influence of a powerful jet, will appreciate the advantages of a lamp which once lit may be left completely to itself, allowing them to give all their attention to the slides.

We recently had an opportunity of seeing this lamp in action at Messrs. Staley's establishment. It is very compact and self-contained, substantially made, and burnt quite without a flicker. We have never seen a steadier arc. The mounting makes its adjustment in the lantern very easy, rack and pinions being provided for the vertical movement, and a worm gear for the lateral. It is supplied in three sizes, for use either on a direct or alternating current, of an E.M.F. of 110 to 220 volts.

The price of the Ewon arc lamp complete, with resistance and all the necessary fittings, is £5 for direct; £5 15s. for alternating current. This is for the 6 ampère lamp. The 15 ampère size sells at £6 10s. and £7 9s. 6d., and the 30 ampère at £13 10s. and £15 10s. respectively.



HOW I MAKE MY CAMERA PAY

By L.S. Brown
Special to Photography & Focus

ONE OF A SERIES OF
ARTICLES SHOWING HOW
EVERY AMATEUR MAY
RECOUP AT LEAST SOME
OF HIS OUTLAY.



HIS week's illustration represents a peculiarly dull-looking subject; yet it has appeared in many papers, and may appear again. I reproduce it to show that even an un-

promising neighbourhood may turn out to have some interest. The village is Derby Haven, in the Isle of Man. At Derby Haven the first Derby horse-race was run. Only later was the great "Derby" transferred to English soil.

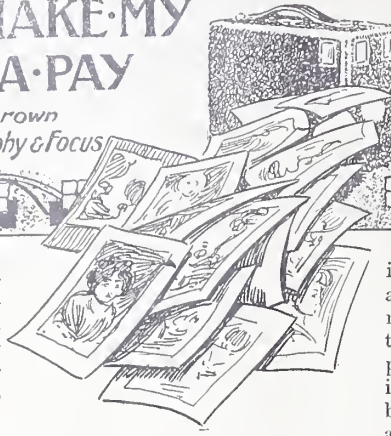
Obviously a photograph of the scene of the first Derby is "topical" every year—namely, during the week in which the Derby takes place. Simple, eh? Yet when I first heard of Derby Haven and first snapped this view, as far as I know not a single other photographer in the Isle of Man or anywhere else had dreamt of submitting this subject to an editor! Although this subject may be a bit stale by now, *similar* half-guineas are waiting to be picked up all over the country by folks who have got a camera and pairs of ears and eyes.

In my last article I spoke of the submitting of prints to editors, but I did not quite cover the subject, and I propose to continue it here. I want to emphasise this point: the photographer is adopting the role of salesman, and willy-nilly he must be business-like. To remain an amateur, in fact, is all very well, but overtly to announce your amateurishness is highly undesirable.

Suppose, then, that you have prepared a print to submit to an editor and are getting it ready for the post.

First, the print must have its title and your name and address written clearly on the back of it. The title should be explanatory, if the subject does not explain itself, and a few additional facts may be added to the title, suitable for printing in a legend under the picture. Write in pencil, because ink may go through the print, but write with a softish pencil or you may have to press too hard. The print should be smooth P.O.P. or smooth bromide, preferably the former, because of its detail-giving qualities. I am aware that one or two papers allege that they prefer to make blocks from smooth matte bromide rather than from glossy P.O.P., but infinitely the majority prefer the latter, and it is always safe to submit it. The mere fact that the block maker has a personal preference for bromide will never cause the editor to reject a P.O.P. (or *vice versa*, for that matter), but a rough-surface print will run a serious risk of rejection.

Now you must have an envelope to put your print in for the post; and this is a little detail in which, incredible though



it may appear, the amateur often shows his amateurishness. The envelope should be the right size—that is, a shade bigger round than the print, and it should be stout, say of Manila paper. It looks bad to submit a print wrapped in brown paper because you have no envelope big enough to take it unfolded; and moreover, a stamped addressed envelope should be enclosed for its return in case of unsuitability, and a stamped addressed sheet of brown paper is a feeble substitute for the right thing. Therefore you must lay in a stock of various-sized bag-shape envelopes, and keep that stock always replenished. If you always use one size of plate, then you will only need one size of envelope; but if you are in the habit of submitting

odd sizes, or various sized enlargements, you should possess a number of different sizes of envelopes, so that you can always find one (or rather two, for one must be enclosed for return) when you need them.

Also, you must keep a stock of pieces of cardboard, as the print must be protected in the post; and the cardboard should be cut of such a size that it will fill the envelope, not tumble loosely about inside it.

Now comes the question whether a

letter should be enclosed with the print, or whether the print should be submitted without comment to the editor. If the subject of the print is "obvious," and if you are frequently in the habit of sending prints to this particular editor and know that he pays proper rates, then a letter is not, strictly speaking, necessary. Nevertheless, a letter looks business-like sometimes, if properly and shortly worded. Contrariwise, it may "give the show away" horribly, if written in an amateurish tone or rambling and not to the point. I have seen a guileless amateur begin his covering-letter with the words "Dear Mr. Editor"—a form of address suited to a schoolboy writing to the oracle of "Tit-Bits," but utterly idiotic from one business man to another.

A form of letter suitable for all general purposes is as follows:

"The Editor, 'Illustrated Weekly.'

"Dear Sir,—Herewith please find one photograph, '—', which I shall be glad if you will consider with a view to publication in the 'Illustrated Weekly.' The price for the right to reproduce in one issue is ten and six. A stamped envelope is enclosed for the return of the photograph in case of unsuitability.

"Yours faithfully,

"—"

If the paper is second-rate and you have reason to suspect that the editor will not pay the fee of ten and six, and on



Derby Haven. The Scene of the First 'Derby.'

the principle that "half a loaf is better than no bread" you are willing to "leave it to him" to decide what fee he will pay, write the words "at your usual rates" at the end of the first sentence in the letter and omit the second sentence altogether.

If you think that the subject of the photograph needs a word or two of explanation, you can make that explanation in the letter to the editor, but be sure that it is short and to the point.

Professional press photographers often use a form letter much like the above, but ending the second sentence: "On condition that my name is placed under the reproduction, and that I receive a voucher copy of the issue in which it appears." This, however, is not a proviso on which I advise the amateur to lay stress. His name will nearly always be properly acknowledged, in any case; and to insist on receiving a complimentary copy of the paper is not always wise.

Observe that the fee—whether half a guinea, or more, or less—is not for the photograph itself, but for its use. As a rule, the photograph will not be returned to the sender after it has been used (though if it is a valuable print he may quite without offence request that this be done). It goes into the waste-paper basket. What is paid for is the "right to reproduce"—not anywhere, or over and over again, but "once" and "in one issue of the 'Illustrated Weekly.'" The best magazines acknowledge this without cavil, but some of the cheaper firms try to claim that what they are paying for is the "copyright" of the photograph. This claim should be strenuously opposed, for it cannot be defended. If, when

you receive a cheque, a receipt form is enclosed in which you are invited to sign away your copyright, do not sign it. Send a receipt on your own notepaper. If a "receipt cheque" is sent, in the wording of the body of which the copyright claim is made, do not sign it. Send it back to the manager of the paper, requesting him to make out a new cheque, and pointing out that you have only sold the "right to reproduce" the picture, for which this is payment, not its "copyright." A new cheque will at once be substituted.

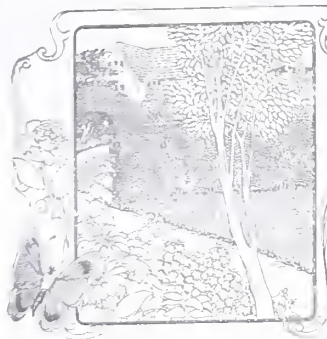
Of course, now and then an editor genuinely thinks it worth his while to buy the exclusive copyright of a photograph; but in that case the bargain should be definitely struck beforehand, and a higher fee paid than would have been paid for the mere right to reproduce. The extent of that fee depends on circumstances; it may be anything from a guinea to fifty guineas. The photographer must decide for himself when he will be wise to resign his copyright, and at what price. However, as I say, he will find that the best papers make no attempt to "bluff" him out of his copyright. But second-rate papers, and ones belonging to the big "popular" firms, he must keep an eye on.

A good preliminary investment of a shilling may be made on "The Writer's and Artist's Year Book," published by A. and C. Black, Soho Square, W.C. This little volume gives an almost, if not quite, complete list of the principal journals, illustrated and otherwise, with their names and addresses, and will therefore be found handy on the writing-desk of the press photographer who is not very intimately acquainted with the Fleet Street quarter and its publishing houses.



Where hill and marsh meet

By Francis A. Tinker.



Miscellaneous Hints for Slide Makers.

By H. Hope Wright. Special to "Photography and Focus."

WHITE LINES round lantern slides are often effective, especially if the image is fairly small on the plate. With a sharp pointed knife and a cover glass for a straight edge the film should be cut through round the edges of the image. It is only necessary to make a narrow cut, say about one-sixteenth of an inch, and then the masking may be done by sticking binding strips on the film side as close to the image as possible, so as to show a very narrow even white line of clear glass all round.

* * *

AN EFFECT OF A MOUNTED PRINT can be obtained in a lantern slide by making the image small on the plate, scraping away the film all round the picture, getting clean edges to the image by using a straight edge or a cover glass, and cutting a piece of tissue paper the same size as the slide with the centre cut out carefully to fit the image. When bound up the effect on the screen is that of a grey coarse surface mount. This can be varied by using more than one thickness in parts, thus securing a multiple mounting effect.

* * *

SURFACE MARKINGS or scum on lantern slides may sometimes appear after drying, but these can usually be removed by immersing for a minute in a very weak solution of hydro-

chloric acid. The solution must be weak, or the film will be unduly softened. A rough and ready method is to add acid to the water until the solution just tastes sharp on testing by putting a finger in the bath and touching the tongue. If there are slight scratches or abrasion marks on the film these will usually disappear if the slide is varnished.

* * *

ARCHITECTURAL LANTERN SLIDES are too often shown of a very warm red or brown colour, which in most cases is out of harmony with the subject. A black or warm black colour is usually most suitable, particularly when the subjects are those in which stonework predominates.

* * *

CHALKY AND HARD SLIDES can often be improved by placing them in a solution of one of Judson's penny dyes or "Dolly" tints of a suitable colour, say, blue, or light green, or yellow. It is surprising what improvements can be made in this way. For instance, an interior with strong sunlight which gives an over brilliant effect may be dyed pale yellow or amber with success. It is important in carrying out these operations to take care that there are no blobs or drops of solution on the surface of the film when drying; also to judge the effect by examination against a piece of white paper or opal.

* * *

CLOUDS IN LANTERN SLIDES are generally added by printing them on a second lantern plate and binding up as the cover



IN A NORTHERN PORT.

Awarded a Certificate in the Advanced Workers' Competition.

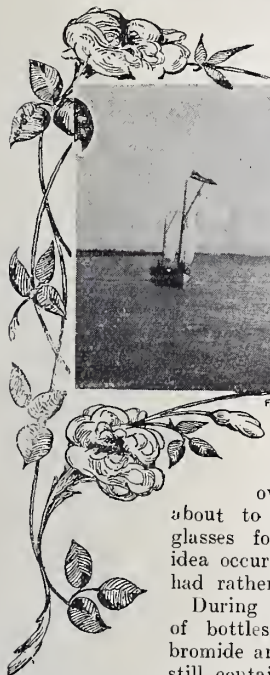
By JOHN WALTON.

glass. In order to effect a good join the cloud negative must first have any trees or landscape that may show blocked out, the slide made from a suitable portion, and placed suitably. No shielding or vignetting is necessary, as the after process of local reduction will remove any parts that are not wanted. After exposing, developing, and fixing the cloud slide, it should be placed glass side to glass side of the landscape slide, and the superfluous clouds with the hard line of the blocking dissolved away by the application of hypo and ferricyanide reducer. This bath should be freshly made and mixed immediately before use or the ferricyanide will lose its power. The solution must not be too strong, or the action

will be too rapid and out of control. As a rough guide, the bath should be of a faint lemon colour. A small brush (the goose quill brushes without any metal fastenings are the best, although a wad of cotton wool will do) is required, and the reducer is cautiously applied to the film, taking care to do the work near a tap of running water. To prevent a hard line showing on the horizon, this part should be quickly brushed over with reducer and instantly put under the tap. All the reducing work should be done over a white dish so that the result can be watched, and it is better to hold the slides in the fingers so that the glasses do not quite touch each other.

Toning and Intensifying Slides at One Operation.

By C. R. T. Special to "Photography and Focus."



HAVING accumulated a dozen or two somewhat "ghostly" lantern plates during the past few weeks,

owing to under-exposure, etc., I was about to clear the films off, and use the glasses for covering other slides, when an idea occurred to me, which, duly carried out, had rather unlooked-for and pleasing results.

During the summer I had purchased a set of bottles of toning solutions for toning bromide and gaslight prints, and these bottles still containing enough solution. I decided to try toning the defective and otherwise useless slides with them; not that I expected any great results, but merely as an experiment. The results, however, quite astonished me.

Instead of the dead failure I had expected, lo and behold! the slides came out, not only changed to a pleasing and beautiful colour, but had also gained in strength sufficiently to make brilliant slides of them! With the original slides before toning, the pictures on the screen were grey and washed-out looking, but now my friends remark, "The coloured ones are grand."

The moral of this is clear—not to destroy the wasters, when by a little extra trouble and at practically no cost we can turn them to good account.

If the slides turn out bad, they should be fixed and washed along with the good slides until, say, a dozen such are in hand, and then the toning process may be tried on them. There is no limit to the number that may be toned at once, but it is well not to do too many at a time. To anyone deciding to try the process a few hints may be welcome.

The solutions used were those put up by the Leto Company, but I believe there are others on the market which will also answer the same purpose. The tones which seem to work best with the "thin" slides are neutral tones of blue and green (the longer the toning, the more brilliant the colour). The clearing bath should not be used, or a slide which may look perfect in the toning solution will come out of the clearing bath hopelessly overdone. This at least is my experience.

There is a drawback, though only a slight one, to the look of a slide by daylight, viz., the clear glass portions of the slide seem to take on a faint yellow tinge, but as this defect is so slight as to disappear completely when the

pictures are thrown upon the screen, it does not matter. In fact, it does not occur in every case. Some of the slides I have made are quite free from it, and the yellowing of others may be due, I should imagine, to my having worked in rather too strong a light when originally making the lantern slides, thus getting a slight deposit upon the clear portions of the slide, which, although not noticeable to the eye at the time, afterwards, in the process of toning, took up a certain amount of colour from the solution.

It is therefore desirable, if not imperative, to see that development of the slide is done in a safe light. This remark,



THE NORTH AISLE, CHRISTCHURCH.

By B. TIMMS

Awarded a Certificate in the Beginners' Competition for September.

of course, applies even more forcibly to the development of bromide and gaslight prints, which it may be intended to tone afterwards by means of these solutions, which certainly give a fine range of colours—in my opinion, much more suitable for lantern slides than for papers.

As regards the permanence of the slides, I have the manufacturers' assurance that if the slides are varnished after

toning (a few moments' operation) according to instructions, there need be no fear of any subsequent fading. The above remarks apply chiefly to the blue and green tones. For red or brown tones, slides of ordinary density are preferable. For an hour's interesting, clean, and profitable winter evening's photography, the toning of thin lantern slides as above would be hard to beat.



A New Photographic Process—Ensyna.

A VERY novel paper for photographic printing has just been brought out by Messrs. Houghtons, Ltd., of 88 and 89, High Holborn, London, W.C. The paper is called "Ensyna," and the developers for it are "Ensynoids." The developer is an essential part of the process, as will be seen later on, and the ordinary photographic developers are of no use with the paper.

Although "Ensyna" seems to resemble gaslight paper it is actually quite different, and the photographer who wishes to succeed with it must put on one side all experiences gathered from bromide or gaslight, or even P.O.P., and must follow the very brief and simple instructions given with the paper. The paper itself does not contain any of the haloid salts of silver upon which we have all depended so long in the past, but is based on the employment of silver phosphate, the development of which is a physical one, somewhat on the lines of the development of the wet plate. The employment of silver phosphate has several advantages. It enables any tone from purple to red to be obtained by simple, straightforward development; it confers excellent keeping properties on the paper, and by its extreme solubility in hypo it enables fixing to be completed in half a minute, while the washing can be completed in a couple of minutes in running water, or in three or four changes.

The coating on "Ensyna" paper is faint greyish green in colour. The printing frame may be filled in gaslight, or even in very weak daylight, without fear of fogging the paper, if the precaution of holding the frame in the shadow of the body is observed. The following table of exposures for an "average negative" we quote from the printed instructions issued with the paper, only pointing out that they are very approximate, and that if the prints receive two or three times as long, the only difference will be that their tone will be found slightly more reddish.

Daylight, in the shade, according to strength of light	...	1s. to 5s.
Incandescent gas	12in. from light,	20s. to 40s.
Bray's No. 5 gas burner	12in. "	30s. to 2m.
Electric light (16 c.p.)	12in. "	1½m. to 2m.
Paraffin lamp	12in. "	60s. to 3m.
Magnesium ribbon	12in. "	1in. to 2in.

The "Ensynoid" developer for this paper is supplied in several forms—as a liquid in 6d. bottles making twenty-four ounces of developer, in 1s. 6d. tubes containing twelve pairs of tablets, each pair making eight ounces of developer, or in 2d. cachets making eight ounces of developer. The mixed developer will keep in working order for a week or more. Fresh developer must be taken for each print, but very little is needed. The instructions stipulate for half an ounce for a quarter-plate print, but less than this will be sufficient. The print is placed in clean water for half a minute to get limp, and the water being poured off the developer is applied.

Wellcome's Photographic Exposure Record and Diary, 1909.

A MONGST amateur photographers the notebook and diary issued annually by Messrs. Burroughs, Wellcome and Co. is deservedly very popular. It seems to contain almost everything definite which the camera-user wants to have at hand, and to contain it all in such a form that any particular bit of information can be turned up at once. It combines with the diary, pages for recording particulars of a large number of exposures in negative making, and also of exposures in positive work—bromide

There is none of the sudden flashing up of the picture which is seen in the case of gaslight prints. For half a minute or more nothing is to be seen, then the image gradually makes its appearance, and goes on gathering in vigour until in from two to five minutes the action is complete. There is no loss of depth whatever in the hypo, so that the development must be stopped when the print looks right, or even slightly before that stage is reached, since the action goes on a little in the washing.

The print after developing is rinsed in clean water, and is then placed in hypo. "Ensyna" can be fixed in plain hypo, but the makers strongly recommend acid hypo for the purpose. Owing to the colour of the silver phosphate the action of the hypo can be seen. It is complete in half a minute, and three or four changes or two minutes in running water will complete the operations.

There can be no doubt that "Ensyna" paper lends itself to the purposes of the photographer, both amateur and professional, to a very remarkable extent. The colours that are obtained by working on the lines above described range from purple to a good red, depending solely on the exposure. The longer this is the warmer is the colour.

The results of our own trials of "Ensyna," as far as they have gone, have been very satisfactory. The most striking feature at first is the way it seems to remove the exposure problem entirely. So long as sufficient exposure is given it does not seem to make any difference in the quality of the print, whether it has three seconds or three minutes. The only difference will be in the colour, the longer exposure being the redder. But even here the difference is not great, and the colour does not tend to become a crude red. For example, we gave the same negative one inch of magnesium at twelve inches distance, and three inches of ribbon at three inches; the second exposure was therefore sixty-four times as great as the first. Both prints took from four to five minutes to develop, both are a brown, one a purple brown, and the other more of a reddish brown, but both colours are rich and good.

From one of these prints, by the way, we were tempted to try and get an ozobrome, and succeeded in getting a first-rate one with no trouble whatever.

"Ensyna" is sufficiently different from anything that has gone before to offer a wide field for experiment. But we would urge those who feel tempted to do anything of that sort not to start until they have first learned what can be done by following strictly on the maker's instructions. They are simple and all sufficient for the production of excellent prints, as can best be shown by pointing out that, although we came quite fresh to the process, we have at present used up two packets of the paper, more or less in trials of it, but have a first-rate print to show for every piece of paper exposed. More we need not say at present.

printing and enlarging, slide making, etc.—a feature which is not usually to be found in exposure notebooks. There is also an exposure calculator on the slide rule principle, which is well-known to many of our readers, and is in constant use by photographers all over the world.

In addition to these features, there are a number of important tables and articles. One which is new this year, and is certain to be very popular this winter is the speed test of over eighty different makes and brands of bromide

paper and lantern slide plates. The value of this information to the photographer who goes from one make to another is not easily over-estimated, and this in itself is cheaply purchased at the price of the complete book, since it enables the worker who knows the exposure any one of his negatives requires with any particular make of bromide paper or lantern plate to ascertain in a moment what exposure he must give for any other plate or paper.

The article on exposure is the most ample, occupying no less than twenty-eight pages, packed closely with information. The details given on such subjects as exposures for copying, for interiors, for telephotographs, for enlargements, for moving objects, for night photographs, and so on, are just what photographers want to know.

The price of the book in London is 1s. It is supplied in three distinct editions to suit the convenience of users in different parts of the world. (1) The Northern Hemisphere edition (bound in light green) for all countries north of the Tropic of Cancer; (2) the Southern Hemisphere and Tropical edition (bound in dark green), for all countries south of the Tropic of Cancer; and (3) the United States edition (bound in red). The purchaser should take care to specify which edition he requires.

The book is one which we can most unreservedly commend to our readers. It is packed with information, and that of a reliable kind, altogether different from the crude compilations of untried formulæ and rule of thumb methods which so often pass muster in diaries and almanacks. The information is clearly expressed, and the whole get-up of the book is attractive. It must save every one of its possessors many shillings, and should form a capital Christmas present for any photographer, amateur or professional.

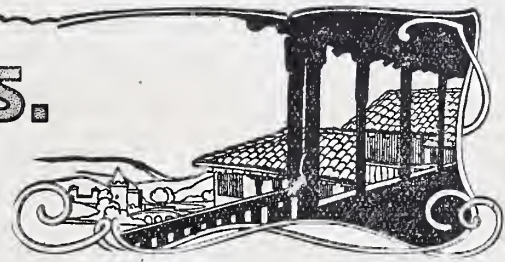
CORRECTING A VIEW FINDER. No view finder, as we have often pointed out in *Photography and Focus*, can be invariably correct; but it is often possible to make one more accurate than it was when fitted to the camera.

To do this, writes Mr. Clute, the camera may be set up in front of a brick wall and focussed as sharply as possible. By selecting certain courses of bricks it is possible to draw a chalk line on the wall which encloses just that part of the wall which is represented on the plate. All that remains to be done is to take some black varnish and block out on the surface of the screen of the finder all the image seen there except that part which is enclosed by the chalk mark.

MAKING LANTERN SLIDES.

By the Editor. A Beginner's Article.

The third of the series of elementary articles dealing with those forms of photography that can be practised indoors on a winter's evening. The first (published December 1) had gaslight papers for its subject: the second (in last week's issue) dealt with printing on bromide paper. Next week bromide enlarging will be considered.



A LANTERN slide is a print on glass. The non-photographer sometimes fancies that it is a negative; but the slightest acquaintance with the camera removes this misapprehension, and shows that, although a slide can be made on the same kind of plate as a negative, it differs from a negative just as a paper negative differs from a paper print—by having the high lights of the subject represented as high lights and the darks as darks, instead of being the reverse.

Although ordinary dry plates can be used, and are used at times, for slide making, it is customary to employ special "lantern plates," which are not quite so sensitive, and can therefore be worked in a brighter light. They are also made to give a picture of a pleasant tone and with an exceptionally fine grain, since the lantern magnifies the picture a great deal. Lantern plates are of two kinds—fast and slow. There are other differences into which we need not go at present. The slow plates correspond very closely with gaslight papers. That is to say, they can be developed up to a warm tone by increasing the exposure and restraining development; and they are most suited for contact printing, although no lantern plate is so slow as to be out of the question for camera printing. The rapid lantern plates are more often used for slide making in the camera, and for slides of a black tone, though here also the difference is only one of degree.

Lantern slides are made of a standard size, so that the photographer may be quite sure that they will fit any lantern. The size in the United Kingdom is

$3\frac{1}{4}$ in. by $3\frac{1}{4}$ in. In the United States they are 4 in. wide, $3\frac{1}{4}$ in. high; and on the Continent 10 centimetres wide by 8 centimetres high. There is no standard of thickness, but a slide consists usually of the plate on which it is made and a cover glass, and the latter should not be thicker than the glass of the former, to ensure its passing easily through the lantern. Though the size of the slide is $3\frac{1}{4}$ in. by $3\frac{1}{4}$ in., the picture on it must be smaller than that if it is all to appear on the screen. About 3 in. by $2\frac{1}{2}$ in. may be reckoned for pictorial slides, which are not often the same height as width; while for diagrams 3 in. by 3 in. can be used.

The two methods of slide making have already been mentioned—contact and in the camera. In making slides by contact, the procedure is precisely the same as in making bromide or gaslight prints, merely inserting, instead of the paper, a lantern plate into the printing frame, with its film side in contact with the film side of the negative. The picture on the plate is then of the same dimensions as it is on the negative, so that to use this method we must have such a subject on the negative that a piece of it 3 in. by $2\frac{1}{2}$ in. or smaller will make a satisfactory picture. In making lantern slides in the camera, or "by reduction," as it is sometimes called, we have no such restrictions. The negative is fixed up, illuminated evenly from behind, and is photographed with a camera using a lantern plate. In such a case we can reduce the whole of the subject on a large negative to such a size as to get it all on the lantern plate, or, if we wish, we can enlarge a small portion of it up to the full lantern slide size, though this latter is not often done. An ordinary

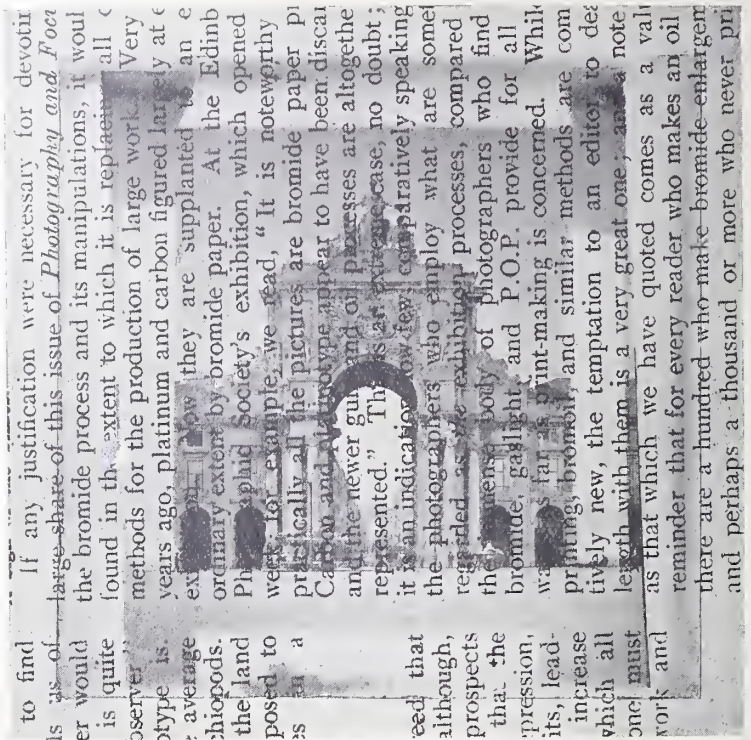
camera may be used for the purpose, if means for holding the negative and illuminating it are available. There are also special lantern slide cameras made, having a variety of conveniences for the work. A simple form of fixed focus lantern slide camera can also be bought. In this the negative, half-plate or whatever its size may be, is inserted at one end and the lantern plate at the other, and in that position the lens forms an image of the whole of the large negative of such a size that it just occupies the lantern plate so that the whole of the picture can be seen on the screen. For several reasons, the beginner will do well to make his first slides by contact.

The materials required for slide making by contact are few and inexpensive. A packet of lantern plates and the requisite developer and some binding strips of black paper gummed form the entire list of extras, beyond what the photographer is sure to have for his ordinary work. Special lantern slide printing frames are supplied, and one of these will be found a great convenience when there are a number of slides to be made; but, acting on the settled policy of *Photography and Focus*, to describe every process so that it can at first be carried out with a minimum of special apparatus, the beginner may start his slide making with an ordinary printing frame, which will answer the purpose excellently.

Each maker of lantern plates puts forward the developer he recommends for his own plates; and unless there is some very good reason for departing from it, that developer is the one to use. The actual developing substance does not matter very much, provided it will give a picture of a good colour, and almost every developer on the market will do this if properly used. The amidol developer recommended for bromide paper, on page 627 last week, for example, is an excellent one for black tone lantern slides on any of the lantern plates on the market. To save turning back, we may repeat that it is made by putting into a pint bottle twenty-five grains of amidol, five grains of potassium bromide, and threequarters of an ounce of sodium sulphate crystals, adding ten ounces of water, and shaking the mixture until all is dissolved. It must be used within two or three days of mixing. But this developer is no better and no worse than plenty of others, and the amateur who is using the formula given by the maker of the plates should stick to it until he gets what he wants; he will gain nothing by changing over to the one just mentioned.

The first slides had better be made on the faster or "black tone" lantern plates, until the worker has familiarised himself with the process, as it is easier to make good black tone slides than those of a warmer colour. All the best slide makers use backed lantern plates, and as the emulsion on a lantern plate is much more transparent than that on an ordinary dry plate backing is very advantageous. The negative is placed in the printing frame, taking care that there is no dust upon it, as this would lead to scratches. The lantern plate is laid down on that part of the negative which is to appear on the slide, and the back of the frame is

put in. The lantern plate must not be slid about more than is absolutely necessary; and if the negative is a large one, say 5 by 4 or over, a paper mask with an opening $3\frac{1}{4}$ by $3\frac{1}{4}$ may be lightly stuck on the glass side, and will help in putting the plate down exactly where it is wanted. The filling of the frame and the development of the lantern slide, even on the fastest lantern plates, may be carried out in a good orange light, such as is safe for bromide paper.



A black tone lantern slide laid down on a printed sheet to show the correct density of the finished slide.

Exposure can only be ascertained in the same way as is adopted with gaslight and bromide papers; that is to say, by exposing the first plate in a series of strips, as described a fortnight ago. Fast or black tone lantern plates by different makers differ considerably in rapidity, and the "average negative" is a very vague quantity. If the printing frame is held at a distance of eighteen inches from an ordinary gas burner, we may give exposures of 8, 16, 32, 64, and 128 seconds. Somewhere between those limits we shall be almost certain to find the correct exposure.

The development of a lantern slide is conducted in the same way as the development of a plate, except that the method of time development is seldom used for the purpose, the extent of development being judged by looking through the slide at the light. More amateur slide makers go astray in judging density than in any other direction; and it is, unfortunately, a matter on which any advice that can be given in words is not of much service. The illustration on this page shows a finished slide of correct density (for a black tone) laid down upon a piece of newspaper. In the dark room, before fixing, it looked, of course, much denser than this.

The trial exposure will help to show how far to carry

development. It is always well to keep the dish covered with a card, except when it is necessary to examine the progress of development. The most exposed part of the plate will probably soon go black all over; the least exposed end will always have a good deal which, looked at as it lies in the dish, remains white. Between these two will lie the correctly exposed strip, and we want to find out which this is. When development has gone on for a little time—say a minute and a half, but this varies greatly with different developers, and according to the temperature—it will be found that one or more of the strips bears a fairly vigorous image. If the plate is a backed one, it may be held under water for a moment at this stage, and the backing rubbed off with the fingers or with a sponge; it is then put back into the developer to finish.

Now it may be taken as a fixed rule in lantern slide work that in a properly exposed, properly developed slide the highest lights of all must be almost, but not quite, clear glass. This is quite different from a negative, where even the highest lights must have a distinct deposit on them, or the plate is under-exposed. If when the density begins to look about right, therefore, we note the strip on which, looking on the surface, the very highest lights of all are just a little darker in colour than they were before development began, we shall be able to identify the part which had the correct exposure. These highest lights must only be the merest spots—the brightest parts of the brightest parts, to put it another way. Any appreciable area of the plate must have a distinct deposit on it, or the slide will be under-exposed and hard. It is not difficult, even for one who is quite unaccustomed to the process, to decide which is the correctly exposed strip, working on these lines, although it is not easy to put the case in words.

The plate should be rinsed after development and then fixed. If amidol is used as the developer, plain hypo is preferable; any other developer may be followed by an acid hypo bath such as is recommended for bromide or gaslight prints. Hydrokinone is a favourite developer for lantern slide work, and is very suitable. If it is used, the slide should be washed, preferably in running water, for at least a minute between development and fixing. If this is omitted, there is a risk of a yellow stain forming while it is in the fixing bath, and this stain cannot be removed.

After fixing, the slide is washed, just as a negative



Sweet Peas.

By Oliver Goldsmith.

is washed, and is allowed to dry. When the washing is finished, it should be held under the tap for a moment, while its surface is gently rubbed with a tuft of cotton-wool, to remove any deposit due to the washing water, and it can then be put to dry where there is no chance of dust getting to it. When dry, it may be laid down on a piece of printed paper and its density compared with that of the slide shown on page 658.

Short of actual trial in the lantern, this is the best way to judge the contrast in a black tone slide, but when development has been modified to give a warm colour this test is no longer of any use. In any case, the test should only be regarded as a temporary one, and the slide should be tried in a lantern at the first opportunity. In the meanwhile, having ascertained by it the correct exposure for the particular negative employed, we may proceed to give it and to make a slide on the lines suggested.

When the photographer can make black tone slides by contact successfully, he may then be disposed to try his hand at getting warmer colours by development.



SUNSHINE.

BY NURSE F. C. DAVIS.

Awarded a Certificate in the Advanced Workers' Competition for September.

This is beyond the scope of a beginner's article. The details of the method will be found in the maker's instructions. It consists of greatly increasing the exposure and using a highly restrained developer, often one containing ammonium carbonate. The plates used for this are usually a slower brand than those employed for black-tone slides, but these slow plates can also be used for black tones if preferred. In the same way, after mastering the process of making slides by contact, the amateur may proceed to the making of them in the camera. Some workers do this, even when their negatives are the right size for contact work, holding that they get a better result by the use of the camera. But these are not beginners' matters.

The slide when dry is not finished. It still has to be mounted. The first proceeding is to mask it. Masks are supplied all ready for use, but it is much better for the slide maker to mask his slide with binding strips, as each mask may in that way be arranged to suit the subject. Round, oval, dome-shaped, and round-cornered masks should be left alone: they are rarely suitable to the pictures.

and attract attention too strongly to themselves. Putting the slide down, film side upwards, on a clean piece of white paper, a binding strip $3\frac{1}{4}$ in. long may be moistened and laid down upon it so as to mask all that is not wanted below the picture. If the strip is too wide it may be allowed to overlap the slide for the time being. The slide is then turned round and another strip applied to the top, in the same way, taking great pains to keep the edges of the two strips parallel. The sides are masked by a repetition of the process, and the slide is put aside for the strips to dry. When dry, it is placed film downwards on a piece of card, and any of the strips which project beyond the glass are trimmed off with a sharp knife.

Cover glasses can be bought, but it will be a very clever slide maker who needs to purchase them. As a rule, the spoiled slides will be quite numerous enough to provide covers for the good ones; six good slides out of twelve lantern plates is an excellent average. The plates may be left overnight in some washing soda and water, and the next day, after putting them into hot water for a few minutes, they may be cleaned with soap and a nail brush, well rinsed, and dried.

The glass is attached to the slide by four of the binding strips. Two pieces, each $3\frac{1}{4}$ in. long, are cut, moistened, and laid face upwards on the table. The slide, with the cover glass placed on it, is then brought down with one edge pressed firmly on the centre of one of the strips. The strip is picked up in this way, and is then smoothed down with the fingers. The two opposite edges of the slide should first be bound, and the strips allowed to dry before the other two are bound.

Before the slide is quite finished it has to be "spotted." Spotting is employed to indicate to the lanternist at a glance how the slide is to be inserted into the lantern. For this purpose, two little spots of white paper are attached to two corners of the slide (or white paint can be used). The proper corners are the two top ones on the side facing the worker, when the slide is so held that he sees the picture on it the right way round. This will be the cover glass side; and it is a good plan to put the spots on the mask before applying the cover glass.

We have now followed slide making in its simplest form from start to finish. There are many photographers who do not practise this branch of work, either from some supposed difficulty or because they have not got a lantern. Let me conclude by reminding them that there is no other method of printing a good negative to be compared in effectiveness with the well shown lantern slide; and there is no branch of photography in which the amateur, with very few exceptions, is so conspicuously ahead of the professional.

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Tudor Street, on Wednesdays, between the hours
of 9.30 and 11.30 a.m., but can only be seen at
other times by appointment.



HOUGHTON'S "SMOKER." The Ensign
smoking concert will be held on Friday,
the 18th inst., at the Holborn Restau-
rant, at 8 p.m. Tickets, price 2s. each,
can be obtained of Messrs. Houghtons,
Ltd., 88-89, High Holborn, London,
W.C., and it is hoped that many photo-
graphic notabilities will be present.

THE ROYAL PHOTOGRAPHIC SOCIETY
had its annual dinner at the Holborn
Restaurant on the 1st inst., Mr. J. C.
S. Mummery, president, in the chair.
The proceedings were of a private
character and the press were not in-
vited, but we learn that a very enjoy-
able evening was spent.

THE ST. HELEN'S CAMERA CLUB
exhibition is to be held in the Windle
Pilkington Hall, St. Helen's, from
February 8th to 13th. There are open
classes, entries closing January 27th.
Prospectus and entry forms can be
obtained from Mr. A. G. Else, Duke
Street, St. Helen's, Lancs.

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bourne, from February 6th to 13th.
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Mr. F. Dutton, of 120, Fenwick Street,
Clifton Hill, Victoria, Australia.

DEATH OF MR. DOWNEY. We regret
to have to record the death of Mr.
William Edward Downey on December
1st. Mr. Downey was a member of
the well-known firm of Ebury Street,
S.W., *par excellence* the photographers
of Royalty. His father, who survives
him, and is now over eighty years of
age, and the other members of the be-
reaved family have our heartfelt sym-
pathy.

PHOTOGRAPHERS ABROAD may not
that the Birmingham and Leicester
Societies' exhibitions will have a foreign
section. Pictures sent in can be
shown at both exhibitions without any
cost to the exhibitor. Full particulars
can be obtained from Mr. Lewis Lloyd,
the Hollies, Church Road, Moseley,
Birmingham, or from the Leicester
honorary secretary, Mr. W. T. Mason,
32, Waterloo Street, Leicester.

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Messrs. Lumière have been experimen-
ting for many years on this, and now
announce the production of a roll film
which is entirely free from all fire
risks. It was announced to be demon-
strated in London the day this issue
goes to press.

AZOL DEVELOPER. Mr. Curtis, re-
presenting Messrs. Johnson and Sons,
lectured on this subject before the
Willesden Polytechnic Photographic
Society. When using Azol for bromide
paper, he said the image would appear
quickly, but the print should not be
hurried from the solution on this
account or weak prints would result.
Prints to be toned by the sulphide
process should be developed to a good
black colour in the shadows, as a print
that was a poor black gave a poor
sepia tone.

DEVELOPING P.O.P. Mr. F. C.
Stames, at the Sidcup Camera Club,
strongly recommended the following
formula for developing partially printed
P.O.P. prints:

Water	...	20 ounces
Metol	...	7 grains
Tartaric acid	...	58 "
Sodium citrate	...	35 "

Prints are placed dry in this and
developed to full strength, when they
are washed, toned, and fixed in the
usual manner. The gold toning bath
need not be used if a reddish tone is
desired. The developer does not keep
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Toning Lantern Slides.

Formulæ and Details of Many Methods.

THERE are a great many ways by which a lantern slide can be toned, some turning a cold into a warm tone, some doing the opposite, and some converting it into quite a fresh colour. Some of these are well-known; but there are many which are not so familiar, and some of the best of these have been collected and revised, and are given below.

In each case it is assumed that the slide has been properly developed, fixed, and washed. After washing, it should be placed in formalin one part, water ten parts, for three minutes, and then be rinsed and dried. It is then ready for toning. Some few toning baths do not absolutely necessitate this formalin preliminary, but with some it is essential, and in all cases it is advisable. To save space, details of washing have been omitted from the formulæ; in every case where two successive baths are advised, the slide should be washed for two or three minutes in running water between them, and a similar washing should follow toning. Varnishing is often a great improvement with a toned slide.

I. Toning with Gold.

A warm toned slide may be toned to a fine purple or purple black by means of the following bath, which should be made up a couple of days before it is required:

Hypo	... ..	2½ ounces
Sodium acetate	... ..	½ ounce
Ammonium sulphocyanide	... ..	1 ounce
Gold chloride	... ..	4 grains
Water	.. ..	10 ounces

The slide should be of a good red colour to start with, and toning should be stopped a little before the desired colour is reached, as the tone becomes colder on drying. The fine tones on some of the best commercial slides are said to be obtained by this process or some modification of it.

II. Toning with Hypo-alum.

The hypo-alum toning bath gives a rich brown slide. The solution is composed of

Hypo	... ..	½ ounce
Alum	... ..	24 grains
Water	... ..	4 ounces

A spoilt slide should be left in the bath for a day or two, to take off its newness, or it will be found to reduce the density very much. The slide is supported in the liquid face downwards, some little distance from the bottom, and the bath is warmed to 160° Fahr.,

at which it is kept for twenty minutes, when the slide will be toned. After washing, the surface must be gently wiped with cotton-wool, under the tap, to remove any scum.

III. Blue Tones with Gold.

A bath which gives anything from blue-black to pure blue, according to the extent to which the action has been carried, has been published by Mr. Stieglitz. Two stock solutions are used:

A.	Ammonium sulphocyanide	60 grains
	Water	... .. 10 ounces

B.	Gold chloride	... .. 15 grains
	Water	... .. 1 ounce

Four drops of B are added to two ounces of A (not *vice versa*), and the slide is placed in the mixture, which rapidly tones it. The quantity named will only tone one slide to a blue, but if a blue-black only is required it can be used for several. It is best to harden the slide beforehand with formalin, and to use the toning bath at a temperature of 70°-75° Fahr.

IV. Mercury and Gold Toning.

Colours varying from brown to purple can be obtained by bleaching the slide first in mercuric chloride, exactly as if it were to be intensified with mercury. It is then well washed, first in (one-half per cent.) dilute hydrochloric acid, and then in plain water.

It is then immersed in—

Ammonium sulphocyanide	... ..	15 grains
Sodium carbonate	... ..	2 grains
Hypo, saturated solution	1 minim	
Hot water	... ..	2 ounces

The solution should be freshly made up, and used before it has gone quite cold, say at about 80° F.

V. Vanadium for Green Tones.

Namias first showed how vanadium could be used to give a good green colour to a lantern slide, and the following formula is based on his discovery:

Vanadium chloride	... ..	2 grains
Ferric chloride	... ..	1 grain
Ferric oxalate	... ..	1 grain
Potassium ferricyanide	... ..	2 grains
Oxalic acid (saturated solution)	... ..	120 minims
Water	... ..	4 ounces

Somerville advises that the ferric chloride, ferric oxalate, and ferricyanide should first be dissolved, as unless the proportions are correct a precipitate will be formed which, were the costly vanadium salt present, would cause it

to be wasted. The vanadium chloride can be kept in a stock solution by dissolving fifty grains in half an ounce of hydrochloric acid made hot by the addition of half an ounce of boiling water.

The slide is immersed in this bath until it is of a bright slate blue. It is then washed in running water, when the colour will become more and more green. The washing is stopped when the tint that is desired has been reached.

VI. Vanadium and Zinc Toning.

The slide when toned to a slate-blue as described in the preceding paragraph may be turned to an olive or sage green by being immersed in—

Zinc sulphate	... ..	5 grains
Oxalic acid	... ..	5 grains
Water	... ..	1 ounce

If left in too long a time the colour will be discharged, but it can be brought back, after washing, by immersion in a five per cent. solution of oxalic acid.

VII. Toning with Ferricyanides.

By converting the image on a lantern slide into silver ferricyanide, it can be toned in a great variety of ways, as Prof. Namias has shown. The conversion is effected by immersing the slide in—

Potassium ferricyanide	240 grains
Liquor ammonia	... .. 2 drams
Water	... .. 10 ounces

In this the picture bleaches rapidly, and when the action seems complete the slide is washed for ten minutes under the tap. It can then be toned to a red by being immersed in—

Uranium nitrate	... ..	5 grains
Ammonium chloride	... ..	5 grains
Hydrochloric acid	... ..	5 minims
Water	... ..	2 ounces

It is then washed, but only slightly, or the red colour will be changed again to black.

If, instead of the uranium solution, we use an iron one, we get a bright blue colour. The following may be employed:

Ferric chloride	... ..	10 grains
Water	... ..	2 ounces
Hydrochloric acid	... ..	5 drops

A good purple red is obtained by immersing the bleached slide in a ten per cent. solution of nickel chloride. The image may appear white on the surface, but after washing and drying it may be exposed for a little while to sunlight, when it darkens down to a permanent colour. The slide toned by this method, which is due to Mr. Mariage, does not differ in density from the untuned.

A rich brown is obtained in the same way by following up the bleaching in ferricyanide with a bath composed of

Molybdenum chloride	... ..	6 grains
Water	... ..	2 ounces
Hydrochloric acid	... ..	5 drops

A great many other variations may be carried out on these lines, first bleaching and then darkening in an acidified solution of a metallic chloride.

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A Simple Method of Making Title Slides in One or More Colours.



“ALL begun is half done,” says the old proverb, and whether the axiom be true or not it is advisable to start a lantern lecture well, and there is certainly no more satisfactory way of commencing than by showing a good and appropriate title slide. Some lecturers start with a map when lecturing on a tour, others have no title slide, while some content themselves with a kind of makeshift title slide, made by writing a title in ink upon the first view slide.

The consensus of opinion appears to be that proper and appropriate title slides are difficult to make, but I hope to prove that they are not, and that they may easily be made in colours. Fig. 1 is a slide I made recently in two colours; the lettering is white upon a black ground, while the portrait “inset” is a rich brown. To make such a slide I proceeded as follows:

A piece of thin, smooth, white paper, in which no coarse grain can be seen when held up to the light, was chosen, and a piece of it was cut to the same size as a lantern plate. Then, by means of a fine mapping pen and black drawing ink, the title of the lecture was written thereon just as I wished it to appear on the screen. As a photograph was to be inserted, the space where the picture was to appear was blocked out, as in fig. 2. The writing may, of course, be in any characters, and the blackened space any shape or size and in any position to suit one's own individual taste.

This “black upon white” design (fig. 2) was then used as a negative, a lantern plate being printed from it in contact, developed, fixed, and washed as usual. This gave a reversed design—a “white upon black,” as shown in fig. 3—which, to my way of thinking, is preferable, since it is not so glaring and tiring to the eyes as a black upon white design, like fig. 2. Fig. 3 shows the design as it looks when viewed from the film side; the reversed writing is as it should be, because the plate is to be used as the cover glass.

The next thing required was the photograph, which can be reproduced on a lantern slide, either by contact or by reduction, in any of the usual ways. The only difference is that care has to be taken to get the photograph required, or the portion thereof, on that part of the slide which will be covered by the open space, shown in fig. 3. It is not necessary to mask the photograph in any way; the whole of the plate may be covered with the photograph, whether all is wanted or not. Fig. 4 shows the lantern plate as used for fig. 1, and it will be noted that the whole of the plate is covered. The portrait slide is finished in the usual way.

When the photograph slide and that with the lettering on it were both dry, they were placed film to film, and the part of the former covered by the open space on the latter was

carefully noted and marked. The glasses were then taken apart, and the whole of the photographic image that was not required was scraped away with a knife, leaving only the portion required to fit the open space. It is sometimes advisable to scrape away a trifle more of the picture so as to leave a white margin round the picture, as was done in this case. The two glasses were then bound up together in the usual way, and as a result a slide such as that which is reproduced in fig. 1 was obtained.

If only one colour is required, both the slides may be made on the same make of plate. My own favourite plan is to tone the picture slide a brown colour, or to use a plate giving

Fig. 1.

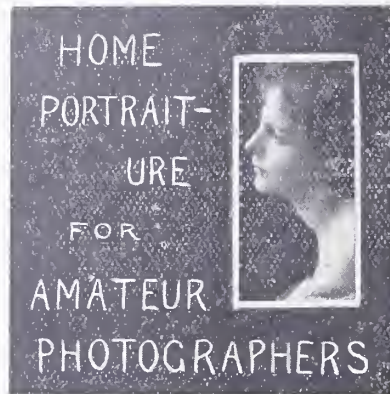


Fig. 2.



Fig. 3.



Fig. 4.

a warm tone for the picture portion, and to let the slide with the writing upon it remain black, or *vice versa*.

If coloured letters are wanted, it is an easy matter to brush aniline dyes over the clear letters of such a slide as that shown in fig. 3. The surplus dye, going on the black portion, will not show; and we may have as many coloured letters as we wish.



A beginner may sometimes fail to get a good black when making fig. 3. In such a case the blackness may be increased considerably by intensifying the slide with mercury and ammonia.

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"The time has come, the Walrus said, to talk of many things."

WELL, readers kindly note once for all that it is quite impossible for me to be more aware than I am already of the fact that there are two of my namesakes at the Zoo? I have received 2,315,001 letters acquainting me with the circumstance. I have seen their portraits, which are very ugly. In spite of this last fact they are no relations of mine. I have been informed by one paper that they are fed on mussels, filleted plaice and other shell fish. The mussels are of course a fraud, being palmed off on their young innocence for oysters. Anyone who has read "The Walrus and the Carpenter" knows that the correct diet of walrus is oysters. See also correct heading to this page. It may also be remarked as necessary information for many misguided beings that the plural of walrus is walrus, and not walruses, walri, walræ, or walra. And now not another word on the subject.

* * *

I have received two cuttings from a certain issue of this paper with a request that I will explain the suspicious bearing of one upon the other. One extract announces the appointment of the select committee on spooks, and the sender expresses surprise that my name is not included. There is no cause for surprise. The committee is made up of two sections—photographic experts and spectre specialists. I am both; so I could not conveniently be included. I have taken ghost photographs by design and otherwise, and I have seen as many apparitions at séances as most people. These apparitions are very funny. I have very grave doubts whether I shall be half as funny a spook as some of them, although I will do my best.

* * *

But the suspicious circumstance to which my correspondent draws attention is that in the same paper appears an advertisement for "faked ghost pictures, double exposures, transparent figures, etc." Clearly there is no connection between the two announcements. The photographic experts want genuine ghost photographs, and the spiritualists have got them. What do either want with faked ghost pictures? As for double exposures surely any kid can supply them by the score. Transparent figures are probably spooks. No human being can be said to be absolutely transparent, although in these days of dear food some of us are certainly getting on that way. Only the other day I saw through a man who wanted to borrow a shilling.

* * *

Perhaps I ought not to refer at all to this question of spirit photography, as the matter is, so to speak, *sub judice*; but no one will suspect the editor or indeed anybody else of being affected one way or the other by anything I say. Were I to express my firm belief in the possibility of spirit photography some of the experts would call me an ass; were I to state roundly that it was all humbug the other experts would call me an idiot. So as I look like catching it either way I will emulate Brer Rabbit by "lyin' low and sayin' nuffin'."

* * *

At the same time I may just as well admit that I have taken ghost photographs myself; and if I am told that they are merely transparent frauds I can only express my regret and plead that they are the best I could do. They are certainly uncanny enough to please the most fastidious, and the ghosts themselves expressed unbounded satisfaction at the results. One of them ordered quite a respectable number of copies and sent them out as Christmas cards. He was quite a nice ghost, for he paid for the prints. However, if you don't mind, I won't say anything more on this subject just now, because it is very late at night, I am quite alone, and have some negatives washing; and if I can pluck up courage presently to go and take them out of the water I don't want to find anything worse on them than there is at

present, or than there was when I last looked at them. A spectral face or an inscription in ancient Greek would just about settle me. In fact, rather than run any risks I'll leave the things to soak in the dark till morning.

* * *

I view with some misgivings the suggestion for uniting in one society those who practise night photography. Surely it would be more praiseworthy to establish a Happy Band of Gaslight Workers, or a Home Union of Virtuous Veloxers and Phireside Photographers. We should encourage that class of work sometimes so pathetically depicted in the advertisements—the home-sweet-home artist who lounges in luxury and light and turns out batches of photographic masterpieces with despatch and M-Q. Such a worker delights his wife and family and provides food for wonder and amusement for the domestic cat. Compare the well-groomed and comfy figure of this home-photographer with that of the frigid enthusiast slopping up and down in the slush, his nose a vivid crimson, his ears an electric blue, splashed from sodden cap to hobnailed boots with the mud-fountains of passing vehicles, counting the laggard minutes while he gets a night picture of the dismal streets. And when he has got it, what is it? Don't say what it is aloud for goodness sake. But really that is about the only word to describe it. When I think of the long cold evenings I have spent at this sort of thing, and look at the resultant prints, I could really call myself by a wicked word. The game is not worth the candle, or rather the gas and electric light.

* * *

Beyond all this, it is not right to encourage people to stay out late in the streets. We shall have members of the Night-birds' Society, or whatever it is to be called, staying late at the club, or the billiard table, or the theatre, and pretending they have been taking night photographs. Let them show their photographs. That will settle them. All they will have to show, if anything, will be a piece of black paper with a miscellaneous disfigurement of white blobs and smears, and perhaps a suggestion of a semi-transparent policeman in the foreground. We may even find hitherto blameless photographers taking up this night-prowling and gradually succumbing to the seductive influences of the kerbstone coffee-stall. Just a cup of coffee innocently taken to warm them during a half-hour exposure, and before they know where they are they have abandoned their photography and yielded themselves up entirely to the fierce delights of "a pint and two thick." No; night photography is a menace, and must, as the Irishman said, be stamped out with a heavy hand.

* * *

P.S. (next morning). There is nothing extra on the negatives except a wide frill all round the edges.

* * *

P.P.S. The morning post brings news of the suicide of one of the walrus. Hooray!

THE WALRUS.

SUBSCRIPTIONS.

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SEA SCAVENGERS.

BY A. G. WARREN.



SPIRIT of the TIMES

The Editor takes this opportunity of wishing his many friends amongst the readers of *Photography and Focus* a merry Christmas.

Christmas Photography.

On another page will be found a suggestion for extemporising a flash lamp, so that the group round the dinner table this Christmas may be photographically recorded. Christmas is probably the one holiday in the year when the camera is least likely to be in evidence. This is due largely, no doubt, to the belief, grounded on experience, that the conventional Christmas weather is the one upon the absence of which we may count with the greatest certainty. Warm, "muggy" days, with little or no sun, and certainly no frost or snow, do not tempt the landscape worker, and so Christmas photography is largely non-existent. Indoors at least there should be plenty to do, and portraiture by daylight or by artificial light might well come in for attention at the holiday season.

Dark Slide Shutters.

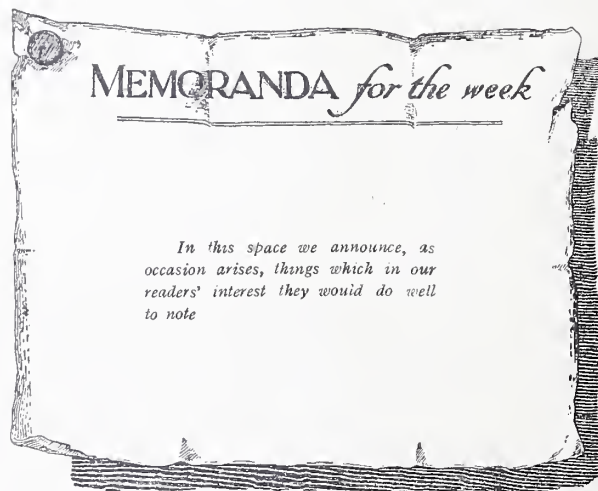
Several readers within the last few weeks have complained to us that the dark slides fog plates left in them for more than a few hours, and fog them locally in such a way as to connect the fog at once with scratches on the inside of the aluminium shutter of the slide. It may be well to point out that it has long been known that a freshly scratched or polished surface of aluminium will fog a plate left near it for a few hours. Contact with the aluminium is not required; the emanations will cross an air space of at least an eighth of an inch. Aluminium exposed to the air soon gets a dulled surface, which no longer affects a plate in this way, and the many dark slides in use provided with shutters of this metal testify to its harmless character. When there is anything in the slide which causes a scratch on the inside surface of the shutter, however, trouble is almost certain to arise, and it can only be remedied by removing the source of friction or by replacing the aluminium shutter by one of some innocuous material, such as vulcanite.

Practical Suggestions.

Our correspondence columns this week contain two letters from readers with simple but useful suggestions gathered from their own work, and sent us for the benefit of their fellow photographers. From time to time excellent hints reach us in this way, but we are of opinion that their number might be greatly increased. So many photographers think that what they have known or used for a long time is necessarily well known to their fellows, and many a useful little dodge goes unrecorded on that account. If any reader of *Photography and Focus* uses any device or method which he has not seen described in our columns we hope he will drop a line telling what it is, or describing it in sufficient detail to allow others to use it as well. Photography more than most hobbies offers opportunities for co-operation of this character.

Photographic Christmas Cards.

The rules for the Christmas card competition are printed this week on page 670. There is just time for most of our readers to send in a card, as the competition does not close until Thursday. A great many cards have come to hand already, although at the moment of writing there is still more than another week for entries to come in.



Glazing Difficulties.

There really are no difficulties in glazing P.O.P. prints by squeegeeing them to ferrotype or pulp boards, yet some workers seem to meet with more failures than successes even in that simple operation. If only they would allow the prints to dry and then rewet and squeegee them, if they were to make sure the squeegeeing surface is perfectly clean, sponging it down with soap and water now and again, and polishing it when dry with a soft cloth containing the merest trace of "paraffin oil" (kerosene), if they would then let the prints get thoroughly dry before attempting to strip them, the alleged difficulties would be unknown. The print must not only "strip without difficulty," it ought almost to come off of itself, or at least with the merest touch of the finger nail under one corner. No pin or knife point should be used to lift it off, or there is a danger of scratching the enamelled surface, and that scratch will be repeated on the glaze of every print subsequently squeegeed down over it.

A Cold Weather Caution.

We are reminded by a recent experience that mere sluggishness of action is not the only drawback of cold solutions. A drop in the temperature may throw some of the substances out of solution partially, and lead to another kind of trouble. Metol seems particularly prone to this. A metol developer may work very well so long as it is not allowed to get too cold, but when once its temperature has dropped below a certain point some of the metol gets out of solution, and, what is more, does not readily dissolve again when the temperature rises. The result is that little crystals of the developer may find their way in an undissolved condition to the plate, where they will give rise to those black spots or comet-like marks which are so characteristic of undissolved developing agents, and are so ruinous to the negative on which they make their appearance. If there is any reason to suspect that this crystallisation has taken place, it is best to run the contents of the bottle through a funnel in which has been placed a tuft of absorbent cotton wool; but a better plan is to avoid all risk of anything of the sort by keeping stock solutions elsewhere than in a frosty dark room.

Photographs facing the Sun.

Some of the finest effects in pictorial photography are obtained by pointing the camera in the direction of the sun. The beginner is cautioned against doing this, and rightly so, as photography under such circumstances becomes peculiarly difficult. The trouble is due to flare spots or ghost images, from which even the best of lenses cannot offer a complete guarantee under such trying conditions. This anyone who has a camera with a focussing screen can see for himself if he turns the lens towards the sun and looks on the ground glass. One or more bright circles will inevitably make their appearance, and it is as a rule only when the camera has been turned so far that the hood of the lens protects the glass from the direct sunshine that the flare spot disappears. There is no remedy, but much may be done by providing the lens with a temporary hood extended as far as possible, provided it does not actually cut off any of the picture.

There is one complete method of prevention, though, which we commend to those of our readers who may be thinking of attempting effects of this character, and that is to dispense altogether with the lens and use a pinhole. All trouble from ghost images vanishes, and the photographic plate will record much more nearly

that which the eye sees. Nor need the amateur avoid pinhole work because he does not like "fuzzy" pictures. There is no need for a pinhole photograph to be "fuzzy," or even to differ in any marked way from the picture obtained with a lens so far as definition is concerned, unless a negative is wanted which shall print on very smooth paper. On the ordinary "crayon" or "rough matt" papers used so largely for pictorial work the pinhole picture will look as sharp as that made with a lens.

THE PHOTOGRAPHER.

The boy stood balanced on one leg and wished that he were dead.
The light that lit the sombre gloom came in above his head.
Yet dutifully posed he stood—"The Spirit of the Storm"—
Creation of the tyro's brain, a bored yet child-like form.
The time rolled on. He could not go without his Father's word.
That Father, fumbling with the lens, his voice no longer heard.
He meekly cried, "Say, Father, say, if yet the picture's done!"
And knew not that the focussing had only just begun.
"Speak, Father!" once again he cried, "if I may yet be gone."
But now the plate was going in, expression must come on.
He turned and looked and smiled and frowned and tossed his waving hair,
And gazed at distant vacant spots in mute but brave despair.
And shouted but once more aloud, "My Father, must I stay?"
Two hours have passed since you began. Why can't I go to play?"
He squeezed the ball, the shutter clicked; he gave a kind reply,
And showered down two halfpennies like tanners from the sky.

Then came a crash like thundersound. The boy—oh, where was he?
Ask of the tripped legs he struck with his anatomy.
Of plates and camera and all that fell about the lad
The chiefest thing that perished there was—*Father's latest fad.*

Photography in the Winter Evenings.

THIS forms the fourth of the five issues of *Photography and Focus* that are specially devoted to indoor winter photography: such occupations which the amateur can carry on in the dark room or often without leaving his fireside. The complete list of the various issues, and the subjects with which they deal, are as follows:

Dec. 1.—Gaslight Papers.

Dec. 15.—Lantern Slide Making.

Dec. 29.—Negative Making on Winter Evenings.

Dec. 8.—Bromide Papers.

Dec. 22.—Enlarging Methods.

The publishers ask us to point out that they will be pleased to send a specimen copy of one of these issues to any photographer with whose address they are furnished by a reader; so that those who would like to draw the attention of their friends to the series need only send a postcard to Messrs. Iliffe & Sons Ltd., at 20, Tudor Street, London, E.C.

Christmas Dinner and Magnesium Powder.

BY F. W. HOCKADAY.

Special to "Photography and Focus."



STRANGE combination, the reader must think, as he glances at my title. It is a strange combination, but one which under certain circumstances

will be found to be fully justified. At the Christmas dinner friends often meet us who do not gather round our table at

any other time, some may never do so again, and at some future time it may be a satisfaction, more than we can realise at the moment, that, with the aid of a little magnesium powder and nothing more beyond our ordinary photographic apparatus, we kept a record of the Christmas gathering.

The arrangements are of the simplest. A pair of bellows can be found in almost every house. We can take the kitchen ones for choice, as if we use the ornamental pair that may be hung up in the living room it may be necessary to appease the powers that be. At any rate, we shall do them no harm. To the nozzle of the bellows, by means of a couple of inches of rubber tubing, the bowl of an old wooden pipe is attached. The pipe should have a couple of inches of its stem remaining, on which to slip the rubber tube. It will be found an improvement to enlarge the hole through the stem of the pipe by means of a gimlet or a red-hot wire. Around the outside of the bowl, either cotton-wool is fixed with the help of some wire, or the cover of a small tin is fitted, having a

hole made in it through which the bowl may project. The apparatus is then complete, and is shown in the illustration.

To use this, it is placed on something sufficiently high to support it at about the level of the top of the head of someone standing up. The seat of a chair that has been placed on a small table will do very well. It will then be at the right height to illuminate those sitting round the table. If the pipe bowl is about half-filled with magnesium powder, it should illuminate properly a room 14ft. by 21ft. The jaws of the bellows should be propped open with a short stick, as shown, and on the top should be placed a flat-iron. To this stick is attached a cord of the required length.

The cotton-wool is saturated with methylated spirit and lit. The lens is uncapped, and the photographer can then take his place, with his guests, at the table. When all is in order, the cord is given a slight pull, and at once the flash appears. The lens should be promptly capped.

I find that with the quantity of powder I have mentioned a fully-exposed negative of about a dozen people round a dining table can be obtained, using an extra rapid "Barnet Ortho" plate with $f/8$. As a rough guide, the light should be somewhere near the camera, say about five feet to one side, and a screen should be interposed between it and the lens, to prevent any of the glare of the flash from reaching the lens. If

a lamp can be placed in the position to be occupied by the flash, some idea can be formed beforehand of the lighting which the magnesium itself will give.



Miscellaneous Notes on Bromide Enlarging.

BY H. HOPE WRIGHT.

Special to "Photography and Focus."

IF THE SOURCE OF LIGHT employed in making bromide enlargements is sufficiently intense, it is a good plan to place between the combinations of the condenser a circular piece of ground-glass. The illumination is very even, and it is possible to use almost any focus lens without experiencing any such trouble as an image of the source of light or uneven illumination. The ground-glass should be as fine a grain as possible, and cut circular, about one-eighth of an inch less in diameter than the condenser. Any good glass glazier will supply and cut the glass. A very satisfactory method of fastening the ground-glass in position is to cut a narrow

strip of corrugated paper sufficiently long to go round the inside of the condenser tube, and then to place the ground-glass on this so that it rests on the edges of the corrugated paper. A further narrow strip can be placed on top, and of sufficient size so that when the combinations are screwed together the whole thing is just a fit. It may be found necessary to attach the corrugated paper lightly to the condenser tube with seccotine. The ground-glass in this arrangement must not be allowed to come into contact with the combinations of the condenser, as, in such a case, the heat of the condensers might cause the glass to crack.

BROMIDE PAPERS can now be obtained in so many varieties that it is sometimes puzzling to the amateur to determine which kind to use for his enlargements. It must not be forgotten that the varieties are more in surface than in the emulsion, and as it is possible to get any of the emulsions with different surfaces, the first consideration is to choose the emulsion that will give the best result from the negative. There is no all round paper that will give the best rendering of any class of negative at will, and considerable experience has convinced the writer that a certain quality of negative will only give the best result on a certain class of emulsion. A negative of strong contrasts or a yellow pyro developed negative will give the best result on a rapid platino-matt bromide paper, but if this class of negative has a large amount of "darks" or shadows in it a better result can be got on the richer emulsion called "ordinary." A thin negative of nice detail will give good results on the "carbon" surface papers which are now so popular, whilst a very thin weak negative gives good enlargements on a gas-light paper such as Leto or Velox. This is, however, a matter for the worker to find out for himself, as there is another factor which governs his choice of paper, and that is the power of the light used for illuminating the negative. Assuming that one incandescent burner is the illuminant it is not possible to get a good enlargement from a strong negative on any bromide paper, and a practical trial will prove that prolonged exposure will not produce good results owing to the weak penetrative power of the light. The shadows may be fully exposed, but the high lights show no detail, whilst if the exposure is made for the high lights the shadows are hopelessly blocked up. It follows that it is

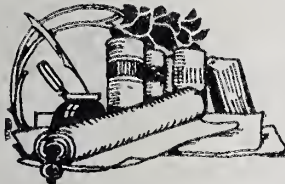
possible to get a bright enlargement from a poor thin negative by using a light of weak penetrative power.

* * *

THE DEVELOPMENT OF BROMIDE ENLARGEMENTS offers many opportunities for correcting faults in the negative. Most trade enlargers start with a normal developer, and if it appears unlikely that details in the high lights will be strong enough, recourse is made to local forcing by means of a developer stronger than usual. Any attempt to "save" an over-exposed enlargement in development usually means failure, as the colour and quality of the image are sure to be very indifferent. Most bromide papers give an image which does not appear to be a very rich black after development; but immediately upon placing the print in the fixing bath the rich colour is apparent, provided the enlargement has been fully developed.

* * *

IN MAKING BROMIDE ENLARGEMENTS by artificial light, using the ordinary lens, it is nearly always necessary to stop it down in order to obtain good marginal definition. This, in addition to increasing the exposure, has the effect of cutting down the penetrative power of the light. If clouds are present in the negative it may be impossible to get them out in the picture, and a useful dodge in such a case is to expose as usual for the landscape, then to shield that part with a card held about six inches away from the bromide paper, to take the stop out of the lens, and give sufficient exposure to the sky part with open aperture to bring out the clouds. The landscape portion must be shielded and the card kept in motion during this operation. It will be found that any lack of marginal definition is not noticeable in the average sky.



An Appliance for Fireside Developing.

By Cecil Hartley. Special to "Photography and Focus."



It is editorially announced that the next few issues of *Photography and Focus* are to deal with photography for winter evenings, perhaps the little appliance described below may be considered to be of sufficient interest to figure therein. It has been designed by the writer to facilitate fireside photography and in the

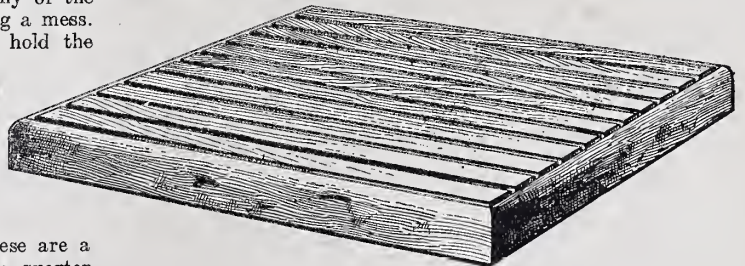
interests of domestic peace, and is known at home here as my "slop-catcher." This name exactly describes it and its purpose, for it is made to stand on the table when work is being done with solutions in dishes, to prevent any of the liquids from getting on to the table-cloth and making a mess.

The "slop-catcher" is in two parts—a frame to hold the dishes, bottles, measures, etc., that are in use, and a dish to catch what is upset from them. The frame measures 28in. by 17in., and is two inches high. It was made of half-inch teak by a carpenter in the town, and is dovetailed at the ends. He was told to avoid glue entirely, as it would often be wet. A strut of the same material crosses it midway from side to side. The top is covered with a series of thin strips of the same wood. These are a little less than an inch and a half wide. They are a quarter of an inch apart, and are secured by screws. When this was made, the whole received three coats of white hard varnish. It has been in use for a couple of years, and is still sound, so the varnish may be supposed to be an effectual protection.

This frame fits inside a shallow tray, also made of teak. The tray is watertight, and the frame is made a fairly good fit in it, the height of the edges of the tray being arranged so that they come exactly on a level with the top of the strips on the frame. The outer angles of the sides of the tray are rounded off, as it was found that they hurt the wrists and elbows when work was being done on the

apparatus. The complete arrangement is shown in the illustration, which should be sufficient to make everything quite clear.

When I am starting to make gaslight postcards in the evening, a sheet of newspaper is laid on the table-cloth, and the "slop-catcher" is put upon that, coming right up to the edge of the table. The strips then form the working bench, and anything that may be spilt, instead of running on to the table-cloth or carpet, passes between them, and is caught by the tray.



I have at times used the tray as a sink, simply emptying dishes or measures into it; but this is not to be recommended. In so large a size, it is very difficult to carry it away and empty it, if there is much liquid in it; some is almost sure to get spilt, but with a little, such as would result from drainings only, there need be no chance of spilling.

Were I to make another I should make it much smaller. Twelve by ten inches ought to be quite large enough for postcard and work of that kind. The present size was made with the idea of using it for making enlargements, but it is a little unwieldy, and enlarging is better done where there is a sink and water supply at hand.



Awards in the Month's Competitions.



The Beginner's Competition for November.

THE entries in this most popular of our competitions show no signs of falling off, but rather of an increase in numbers. There is also a very noticeable increase in the number of competitors, more and more of our readers every month realising that in a competition of this kind numbers are a source of weakness rather than of strength.

There are always some workers who think that by packing up a bundle of twenty or thirty prints and sending them in they may by chance pull off a prize, but the chance is a very poor one at the best of times, and in the *Photography and Focus* competitions is so small as to be virtually non-existent. The only way to compete with any hope of success is to pick one's best negative and to make the best possible print from it, and to send that in. If a dozen or more prints are to be made it is much wiser to make them all from the same negative, taking the utmost trouble to make each one as perfect as possible, and then to select the best and forward that. Some competitors send several prints off one negative, but this again does not help matters. If the sender

really does not know a good print from a bad one, he is hardly in a position to compete even in a beginners' competition.

But, as we have already pointed out, these are practices which are being abandoned, and the entries month by month show an increase in the proportion of painstaking, careful work, which we are very glad to note.

Awards.

FIRST PRIZE (a signed copy of "The Complete Photographer").—S. Isherwood, 58, Musgrave Road, Bolton, Lancs., for "The Octogenarian."

SECOND PRIZE (a free subscription to *Photography and Focus* for twelve months).—S. J. House, 6, Fairpark, Exeter, for "The Old Bridge."

CERTIFICATES.—Josiah Birks, 58, Hall End, West Bromwich, Staffs., for "The Broken Barrow"; Miss May Shepherd, Knowle Hall, near Bridgwater, for "A Moonlit Sea"; Rev. N. H. Johnson, East Lodge, Mistley, Essex, for "Portrait of a Lady."

The Special Subject Competition for November.

THE number sent in to this competition compare favourably with its predecessors, but a great many of the competitors seem to have missed the point of the competition entirely. The subject set was "A Domestic Interior," and it will be within the recollection of many that some two or three months ago we published an article on this particular topic, expressly with reference to the competition. More than half the total number of prints sent in, however, are simply figure studies or groups, and cannot anyhow be regarded as domestic interiors. There is no reason why one or more figures should not be included in a "domestic interior" if the competitor thinks well, but the figures must not be given such pictorial importance as to make the interior itself play the part of a mere setting for

them. Unfortunately from the competitive point of view, the best photographs, excluding the print which takes the first award, were without exception those in which this error was more or less perceptible.

Awards.

SILVER PLAQUE.—Aubrey Brocklebank, West House, Hartford, Cheshire, "The Billiard Room."

BRONZE PLAQUE.—Norman Blake, 112, Honbury Street, Bedford, "A Stranger in the Village."

BRONZE MEDAL.—Herbert L. Stansfield, 368, Bursley Road, Colne, Lancs., "Washing Up."

CERTIFICATES.—E. J. Brooking, Wisbech, Cambs., "A Daily Task."

The Advanced Workers Competition.

THERE is little or nothing that need be written about this competition this month. In numbers and in quality it is just about what it usually is, most of the regular competitors being represented, and one or two new names making their appearance. There has been a little delay in dealing with the criticisms, but they are now all well in hand, and we hope that before the end of the year all the prints will have been returned. A larger number than usual came to hand without stamps this month, we are informed.

Awards.

SILVER PLAQUE.—Walter Wood, 45, Beulah Road, Thornton Heath.

BRONZE PLAQUE.—Easton Lee, 85, Osborne Avenue, New-castle-on-Tyne, "A City Tower."

BRONZE MEDAL.—Arthur Dolden, Newhaven, Maple Road, Leytonstone, "Emptying the Sea."

CERTIFICATES.—F. G. Newmarch, 54, Upper Walthamstow Road, Walthamstow, N.E., "A Biskra Baby's Bath"; C. S. Coombes, 246, Birkbeck Bank Chambers, W.C., "Honesty."

A Christmas Card Competition. Rules and Prizes.

WE offer a signed copy of "The Complete Photographer," the half-guinea work by the Editor of *Photography and Focus*, now in its second edition, to the sender of the best photographic Christmas or New Year card. The sender of the second best will be allowed to select photographic books to the value of five shillings from Messrs. Iliffe and Sons' list; and the sender of the third best will be allowed to select books to the value of half a crown.

The cards must be either wholly or in part photographic; the photographic part must be the work of the sender; commercial Christmas card mounts or sensitised cards may be used, but the extent of the competitor's own work in the finished card will carry weight in making the awards.

Each competitor may send in any number of cards, but each card must be posted separately, and each must bear the name and address of the sender.

The copyright of all cards, winning and otherwise, will remain the property of the competitors, but the publishers of *Photography and Focus* shall have the right to reproduce in that paper, without payment, any of the cards that may be sent in to the competition.

No cards can be returned or criticised, nor can correspondence be entered into concerning the competition.

All cards must be addressed, "The Editor of *Photography and Focus*, 20, Tudor Street, London, E.C.," and must be distinctly marked on the outside, "Christmas Card Competition." They must be sent by post, and must reach Tudor Street by the first post on Thursday morning, December 24th. Competitors are reminded that postal delays are to be expected near Christmas, so that ample time should be allowed, as no extension can be granted. All packets arriving with excess postage to pay are refused, so that care should be taken to see that the postage is fully paid.



"Critics?—appalled I venture on the name,
Those cut-throat bandits in the path of fame."—BURNS.

OVER and over again we have been exhorted, by pictorial authorities, to avoid mingling extremes of darkness and lightness, and a derogatory term, "soot and whitewash," has been invented to describe the fault. Still, I observe many of the most be-lauded works at the Salon, the R.P.S., and other exhibitions visibly suffering from this very disease—excessive contrast. But these masterpieces are, if you please, "arrangements in tone," or "designs," or "studies," and they must not, I gather, be judged by the same crude standards applied to the "mere snap" of luckless Mr. Tyro.

Comment on the part of so outcast a cynic as a Bandit would be impertinent. I can merely, therefore, warn my audience of Beginners that if they think that soot and whitewash is a recipe for "Art" they're woefully on the wrong track. It is far more often a patent sign of ignorant under-exposure, believe me, and if the alleged Great Men of pictorial photography choose to under-expose their plates that is their look-out; it doesn't become correct exposure because a Great Man's finger-tip pressed the button.

There are a good many ultra black and white prints amongst those which lie before me at this moment, and I

have picked out a few typical specimens. Some are successes in spite of, some are failures because of, this under-exposure malady. And a few one might almost say are "correctly under-exposed," if this is not a bull.

"The Swing Bridge" I hold to be a fair sample of the last-mentioned class. Personally, I think it rather fine; and the man who saw the austere and clumsy dignity of the thing ought to do strong work in the future. It is as plain as a pikestaff that the bridge is under-exposed, nevertheless. Even with this frontal lighting a long exposure could have been given to render every nut and bolt in the structure. But I take it that the detail of the iron-work was precisely what the photographer didn't want. His eyes couldn't see that detail—certainly not against that glaring sky. The sunset, and the grim, gigantic silhouette against it—these made his *motif*. Technical exactitude in exposure would have marred it.

Here, then, we have a print containing shadows which are impossibly black and scientifically wrong, yet which is on the whole a success. Its effectiveness is its own excuse. But this device of making the camera stare sun-wards is so easy that it leads to in-



At Break of Day. By Hy. D. Beck.

numerable failures. "At Break of Day," for instance, is not only commonplace and uninteresting, but technically wrong. It is under-exposed; the sea to right and left is unconvincingly black; so is the upper part of the sky; so is the shadowy tug;—too black, that is, if we are to credit the evidence of our senses, which tell us that the sun was quite a height above the horizon. Granting that there are equally solid blacks in "The Swing Bridge," and that King Sol is equally high, "Break of Day" is, nevertheless, bad, while the other is good. "Break of Day" has no dignified "scheme," like its rival; the tug is half out of the print's margin, making the composition—if there is any—atrocious. So in this instance we can't overlook the under-exposure, though we couldn't help overlooking it in the other.

In "The Shrimper" we find the same old glittering waves, and the same old trick of silhouette. Where the illumination is coming from I don't know. The orb of day has, I suppose, been trimmed off, and maybe wisely. The result, at any rate, is capital; for



The Swing Bridge.

By E. K. Hunter.

... of having a melodramatic heaven competing for interest with the real subject—namely, the man and the element from which he gains his food—we have all the drama concentrated just where it ought to be. That grey and uninteresting sky may not be irreproachable, criticised from a severely naturalistic standpoint. But it is so much more satisfying than the too-just-then sky of "Break of Day." The only fault I have to find with "The Shrimper" is that the cross-piece of his net too nearly fits the line of the verge of the sea.

"Raith Lake" is yet another example of the silhouette games with the (more or less) sunset sky stop. It is horribly wrong, and hasn't enough intrinsic beauty to atone for its wrongness. The silhouette portions of the prints we have already considered had little or no perspective to bother about, but "Raith Lake" is, or ought to have been, full of perspective. Under-exposure has killed this by killing the atmosphere, with the regrettable result that there are no planes of distance. Of course, the presence of the sheet of water tells us that the hill against



The Shrimper.

By Sydney H. Hansford.



Raith Lake.

By R. M. Arnott.

the sky is further off than, say, the tree on the left, but there is no evidence in the shape of tone contrasts. The hill is as black as the tree, the foreground plants and reeds are as black as the hill, so they might each be cut out of needle paper and stuck on a background of the sky, for all the difference it would make.

Everything here has been sacrificed to the preservation on the plate of that sky and those ripples, but the sacrifice has been fruitless and unjustified, for however true the sky and the wavelets, the landscape's inky untruth spoils their effect, and, as it were, un-deceives us.

"Mere truth to nature isn't art." Yes, but you mustn't mix up truth and untruth in too close juxtaposition in the same work, or the brain will get confused, will fail to distinguish your intention, and will count even the true part to be a lie.

THE WEEK'S MEETINGS.

MONDAY, DECEMBER 21ST.

Walthamstow P.S. "The Combined Bath," F. D. Hunt.
 Scarborough & D.P.S. "Velox Papers" W. F. Slater.
 Stratford P.S. "Midland Photographic Federation Portfolio."
 Dewbury P.S. "Thornton-Pickard Prize Slides." R. Hesketh.
 Southampton C.C. "Bromoll Process." C. H. Hewitt.
 U. Stereoscopic S. "Excursion" Competition.
 Cardiff & Forest Hill P.S. "Print and Lantern Slide Competitions"
 South London P.S. "Excursion and Lantern Slide Competition,
 Leek P.S. "Prize Slides."
 Cleveland C.C. "Photography and Focus Prize Slides."
 Kilmarnock & D.P.S. "Pictures with the Goerz Lens."
 Glasgow & W. of S. A.P.A. "Photography as a Means of Artistic Expression."
 J. Craig Annan.
 Lancaster P.S. "Picturesque North Wales." H. Gaythorpe.
 Walsley P.S. "Some Photographic Chemicals." W. B. Shaw.

TUESDAY, DECEMBER 22ND,

Birmingham P.S. Affiliation Prize Slides.
 St. Helen's C.C. Exhibition Meeting.
 Keighley & D.P.A. "Velox" Paper. W. F. Slater.
 Blackpool & Fylde P.S. L. & C.U. Portfolio Night.
 Glasgow Southern P.A. Members' Slide Competition.
 Monklands P.S. "On Arran Isle." James Jack.

Societies will have their meetings announced here if the syllabus is sent to us at the beginning of the Session or from time to time.

TUESDAY, DECEMBER 22ND (continued).

Nelson C.C. "Camera Subjects and their Treatment." F. Hartley.
 Hackney P.S. "The After Treatment of Bromide Prints" S. Woodhouse.
 Hanley P.S. "Prize Slides."
 Nelson P.S. "The Practical Side of Picture Making." A. Plunkett.
 Slough P.S. "Beginners' Night."
 Knottingley & D.P.S. "Gum-bichromate Printing" R. Jackson.

WEDNESDAY, DECEMBER 23RD.

High Cross Inst. P.S. "Velox Paper." W. F. Slater.
 Edinburgh P.S. "Gaslight Printing Processes" James Oliver.
 Sale P.S. "The Sulphide Process." J. Pilkington.
 Croydon C.C. "Conversational Evening."
 Greenock Y.M.C.A. Camera Club. "Photography and Focus Prize Slides."

THURSDAY, DECEMBER 24TH.

Paisley Philosophical Inst. "A Trip to Spain." S. Stewart.

FRIDAY, DECEMBER 25TH.

Christmas Day.

SATURDAY, DECEMBER 26TH

Bank Holiday.

Practical Paragraphs.

MASKS FOR LANTERN SLIDES.

There is no more fatal step taken in slide making, writes "Camera," in the "Glasgow Evening Times," than the purchase of an assorted box of masks of all sorts of useless shapes and sizes and then proceeding to fit the slide to the mask rather than the mask to the slide. The advanced worker, while he studies the question of the best shape of mask for his work, also considers the best tone of slide, and the one calculated to show the slide picture at its best. Many times I have seen unfinished slides of good quality when tried in the lantern, utterly spoiled pictorially when masked and finished. In competitive work these are the points which may mean the difference between success and non-success, other things being equal.

* * *

STEAMED BROMIDES.

Mr. J. M. Sellors, writing in the "American Annual of Photography," says that dull bromide prints can be greatly improved by steaming the dry print. "This," he says, "gives a depth and transparency which approximates very closely to that of the wet print, and, as far as I have experimented, can be obtained in no other way. No special apparatus is required, the ordinary domestic kettle being all that is necessary. When the water is boiling hard, and a strong jet of steam is issuing from the spout, the surface of the print is brought to within an inch or two of the spout, and moved about fairly quickly until the steam has acted over the entire surface. On examining the print it will be found to have a semi-glossy appearance. As a rule the one steaming will be sufficient, but if in a minute or two this partially disappears a second application of steam should be given. The steam should on no account be allowed to play on any point for more than a second or so, as there is a danger of entirely melting the gelatine film. Unless one has the cuticle of a rhinoceros and the feelings of a bronze statue, it is not advisable to hold the print up to the steam with the hand, but to pin it by the four corners to a board and hold that up, as the impinging of a jet of live steam on the fingers for the fraction of a second will cause a sensation the reverse of pleasant. Nearly all the bromide papers on the market are amenable to this treatment, but it has very little, if any, permanent effect on a few of the very thinly-coated matt papers. Considerable care should be taken not to over-steam prints that have been toned, as I have found that repeated applications of steam will affect the colour."



AFTER THE RAIN.

BY JOHN MCCLURE.

Awarded the Second Prize in the Sichel Competition.

SUNSHINE THROUGH THE WOODS.

BY H. J. BLAKE.

*Awarded the First Prize
in the Sichel Competition.*



CONDENSER-LESS ENLARGERS.

By W. Hine. Special to "Photography and Focus."



THE prime cost of a condenser is often greater than that of the daylight enlarger complete, especially when the enlarging has to be done from negatives of half-plate size or over. Even a condenser to take 5x4 plates is beyond the means of many, and there must be a great number of photographers who, while they can afford a condenser for their enlarging, if it is a necessity, would be very glad to do without it if sure that they could do so without the quality of the work suffering.

All daylight enlargers may be described as "condenser-less," but the subject of these notes is apparatus made for night use, and, therefore, apparatus employing artificial light. Enlargers of this kind which do not require a condenser may be divided into two classes—those which employ direct light that is not reflected, and diffusers, and those which employ reflected light, such, for example, as the well-known Ellipsoid.

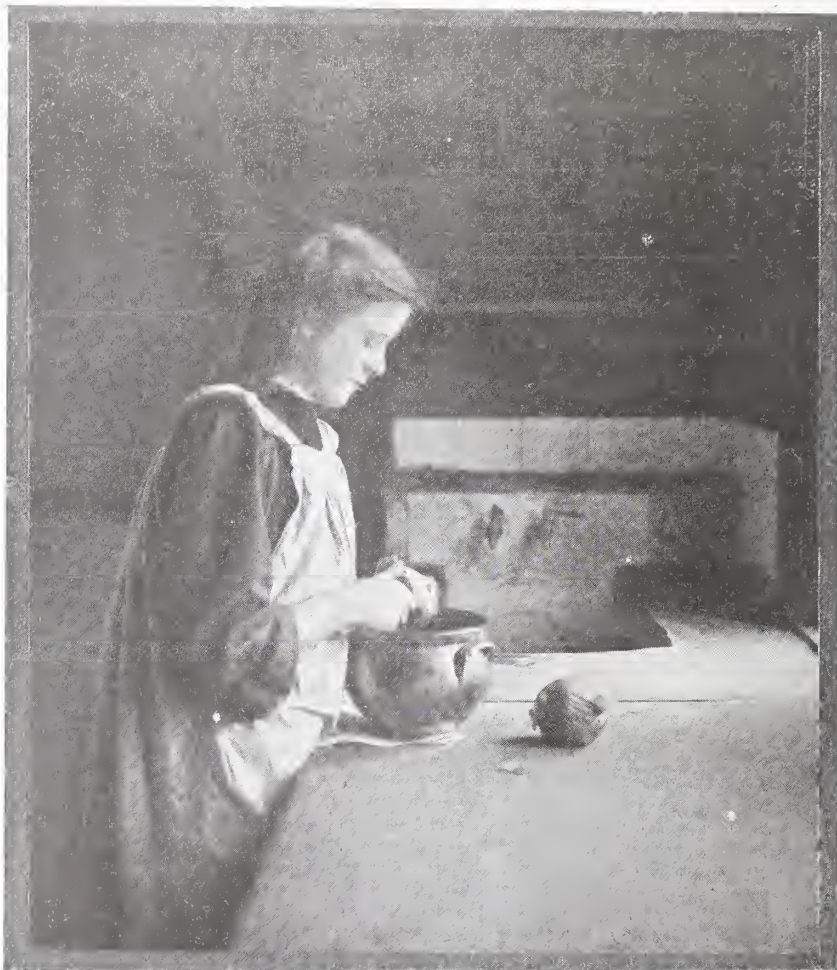
The first class includes all fixed focus and other "daylight" enlargers. The use of a daylight enlarger at night may puzzle some of my readers at first, but there is nothing extraordinary in it. The cheaper fixed-focus enlargers are not very satisfactory for this purpose, because the lens they contain is so much stopped down that the exposure even under the most favourable circumstances is very prolonged. But if the enlarger has a fairly rapid lens, say one working at f/11, it is easily used at night. Those who care to take the trouble can construct an enlarger of cardboard, in which the camera lens can be put for the time being. This will be fast enough in all probability.

The illuminant for direct work is magnesium ribbon. No other convenient form of artificial light is powerful enough to keep the exposures down to a reasonably short time. The ribbon should be burnt at about 6in. from the negative in the enlarger, and between the two a suitable diffusing screen must be placed. The best material for this is *papier minéral*, which is so extensively used for backing up negatives as a basis for hand work. A frame should be made about 25% each way larger than the negative in the enlarger. For half plate, 8in. x 6in. is a convenient size. It may be of 3in. square wood, and after it is smoothed up, a piece of the *papier minéral*, about 9 x 7, is damped between blotting paper and laid on the table. One side of the frame is slightly gummed, laid down on the paper, and then picked up, bringing the paper with it. There is no need to touch it till it is dry, when the *papier minéral* will be found to be stretched as tight and smooth as a drum. The other side of the frame is then coated with *papier*

minéral in the same way. Two pieces of glass of the same size as the external dimensions of the frame are then placed one on each side to protect the *papier minéral*, and the whole is bound up together like a magnified lantern slide, with strips of linen or brown paper and glue. We then have a diffuser all ready for use.

To employ magnesium ribbon with a daylight enlarger the latter is loaded with negative and paper, exactly as for daylight enlarging, and is laid on its side; that is, with the negative vertical. In a line with the negative and about 2in. away from it is placed the diffuser, and a focussing cloth is placed over the opening between the two in case of accidents with the magnesium. There is nothing more to do but to burn the requisite length of ribbon an inch or two away from the glass of the diffuser.

The quantity of magnesium required is considerable, but so much depends on circumstances that it is difficult to give any useful hint. I have made an enlargement from a fairly dense negative with 8in. of ribbon, using an R.R. lens with its f/11 stop, and enlarging from quarter to 10 x 8, but more than this is generally wanted. It is best to cut the ribbon up into 8in. lengths, and to burn these one after another, keeping them moving all the time to even up the light as much as possible.



INDUSTRIOUS.

BY CHARLES WARING, SEN.

Awarded the Silver Plaque in the Advanced Workers' Competition.

For cheapness and efficiency no enlarging apparatus is superior to that in which either one or two incandescent gas burners is enclosed, with a reflector so arranged that only reflected light reaches the negative, which is held in a holder with the camera (or else a special bellows and enlarging lens) in front of it. The illumination which can be got in this way is very even, and as the lens is almost sure to be worked at a much larger aperture than the lens in the usual "day-light enlarger," the exposures are quite within manageable limits. From ten minutes to half an hour is generally sufficient, enlarging from half-plate up to 12×10 or thereabouts.

In all enlarging of this kind it should be remembered that stopping down the lens increases the exposure necessary, just as it does when the lens is used for photographing in the ordinary way. One has to give four times as long with $f/16$ as with $f/8$, for example. This is mentioned because it does not hold good when enlarging with a condenser, when it may happen that with $f/16$ no more exposure is needed than with $f/8$. The camera lens that was used to take the negative may be used to enlarge it up to any size that may be wanted. The size of the enlargement makes no difference, provided the lens covered the plate properly in the first instance; and when enlarging there is no need to stop it down more than it was stopped down when the negative was taken.

The heat given off by incandescent gas burners is great, and attention must be given to the apparatus to make quite sure that the current of air through it is not blocked up. There is no risk either to the negative or to the camera, if the arrangement is working properly; and it is not difficult to see that the air passages are left clear. Stray light in the room must be avoided as much as possible, but not by blocking up the air way. It is only fair to the makers to say that in those instruments I have seen no stray light got out worth mentioning, and the enlarger never got too hot. If it is handled carefully, and kept when not in use where it is not exposed to any serious jar, the mantles will last unbroken for a long time. They should not be used when badly broken, as in such a case the light will be quite different, and exposure calculations upset.

I hope that what I have written will have the result of encouraging some of my fellow readers of *Photography and Focus* to take up "condenser-less" enlarging. For quarter-plate an enlarging lantern and a condenser is to be preferred. The cost of a small condenser is not great. Besides, as the final size of amateur enlargements is generally very much the same, a greater degree of enlargement is generally wanted with the small sizes, and the greater the enlargement the longer the exposure.

CORRESPONDENCE

The Editor is not responsible for the opinions of his correspondents.



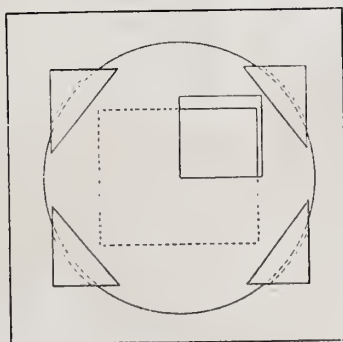
FOUR PICTURES ON ONE PLATE.

Sir,—I read in *Photography and Focus* for Nov. 17th an article by Mr. E. Spencer entitled "Taking Two or Four Photographs on One Plate." I had often wondered how best I could take four small pictures on one quarter-plate without buying any expensive apparatus, and no doubt many more amateur photographers like myself after reading the article put it into practice.

It struck me it would save trouble if the card were arranged so that it was not necessary to remove the back of the camera every time, so I constructed the arrangement shown in the illustration. It consists of a square piece of

cardboard the size of the back of the camera with an opening the size of a quarter-plate cut in the centre of it. Over this opening is fixed a circle of card with a square opening in it, $2\frac{1}{2}$ in. each way, that is, half the length of the plate. This circle is fastened under four small pieces of card, much as the turntable of a camera is fastened, so that it can be easily turned round. The whole arrangement is blacked and is finished.

To use it, the back of the camera is removed and the card inserted, with the revolving piece nearest the lens, and the two openings as shown in the illustration. The back is then put into its place and the picture focussed on one top corner of the screen. After exposing all that has to be done is to remove the dark slide and turn the revolving piece through a quarter of a revolution, and so on. It will be seen, therefore, that when once the card is fixed into position the back



of the camera need not again be removed until a full size picture has to be taken. The arrangement for quarter-plate cannot be used in a smaller camera than half-plate, as the revolving card must be at least six inches in diameter to clear the corners of a quarter-plate; nine inches is required for a half-plate.

Yours, etc.,

FRED STANTON.

THREE HINTS.

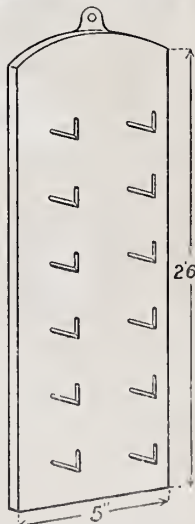
Sir,—In *Photography and Focus* for November 24th, page 593, you give particulars of a very useful drying rack for negatives. As this is a fixture, and a good many of your readers, like myself, may be compelled to use the ordinary bathroom as a darkroom, and have to remove every trace of photography when work is over, I send you a rough sketch of the rack I use. It is simply a board, 5 in. wide and 2 ft. 6 in. long, with an eye at the top by which it may be hung up. Hooks an inch and a half long, with one end turned up and the end filed off, are screwed into it at intervals. I can hang this up near the window, and the plates are always dry by the morning. The board can then be stored away under the bath until it is wanted again.

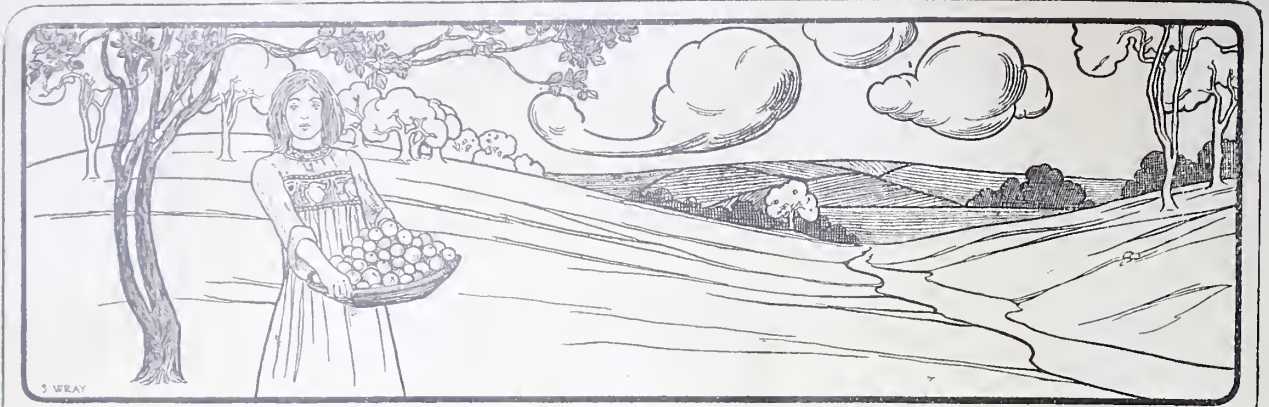
Most photographers find a difficulty in printing P.O.P. at this time of the year. If they put the frames outside the window the damp spoils the prints, while if they put them flat up against the glass inside, the light is not even all over the plate, and there is a danger of their falling backwards. To get over this difficulty, I tack an ordinary penny blind-lath to the outside framework across the window about three inches above the centre of the window. This allows the printing frames to rest at an angle of about 45° , thus getting a direct light on to the negatives, with no fear of falling.

When washing prints or plates in the lavatory basin, I put a small piece of paper, doubled two or three times, on one side of the plug when putting it in. This allows a little of the water to flow out at the bottom all the time, taking with it the hypo which settles down towards the bottom.

Yours, etc.,

A H ROBBINS





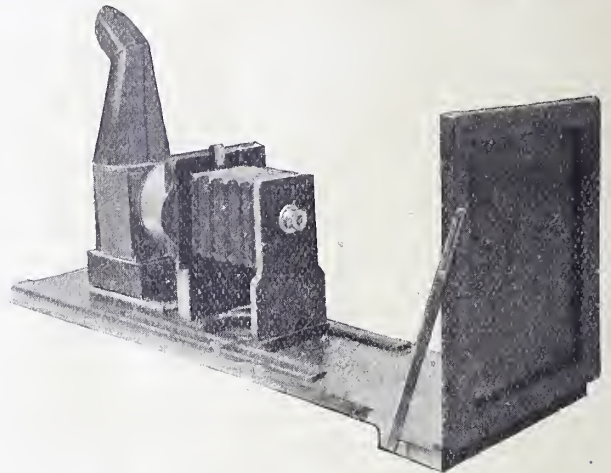
THE LATEST IN APPARATUS & MATERIAL.

The Improved Autokon Enlarger of Messrs. Griffin.

THE Autokon, as our readers know, is the name given by Messrs. J. J. Griffin and Sons, Ltd., of Kingsway, London, W.C., to their automatic enlarging lantern, a piece of apparatus which, by an ingenious arrangement on the baseboard, automatically focusses itself, for any degree of enlargement that may be required. All that has to be done is to turn the pinion of the enlarger until the picture on the easel is seen to be of the required size, whatever that may be. However the lantern is moved backwards or forwards, the front carrying the lens varies its distance from the negative, so that all the time the picture on the easel remains sharp. All those photographers—and they are many—who have worked with the Autokon are agreed as to the way in which that ingenious piece of apparatus saves both time and worry.

Various improvements have been introduced into the Autokon for the present season's trade, the most important of which is the double swing that has been provided for the easel. There was a time, not so very long ago, when the idea of correcting the distortion due to tipping the camera by swinging the bromide paper during enlarging was looked upon as a fad of little practical service. It is recognised now as a necessity in all the most complete and perfect enlarging apparatus, and in the Autokon we have this movement in both directions. The rackwork in the latest pattern has also been greatly extended, so that the same lantern can now be used to make even a lantern slide from a quarter-plate, and carriers are provided to enable it to be used for slide making. The enlarger is now made throughout of mahogany, and is nicely finished.

In spite of its advantages and conveniences, the Autokon is in no sense a costly luxury, when it is remembered that it is really not merely an enlarging lantern, but a complete



enlarging bench and easel. With a 5½ in. condenser, fitting it for quarter-plate work, a lens with iris diaphragm, oil lamp, or incandescent gas, yellow cap, etc., complete, it costs £5 5s.; or for half-plate work, £9 9s.

The Process Year Book for 1908-9.

THE "Penrose Annual" has made its appearance, and as usual reviews the process work of the year with a profusion of illustrations, which makes it quite without a rival. Although making its appeal mostly to those who are interested only in process work and the reproduction of pictures, there are some articles which are of wider scope, and will interest photographers of the more advanced class. Amongst these we would particularise Prof. Namias's contribution on Autochrome work, and Dr. Clay's admirable paper on lenses.

There is one minor matter in which we should like to see the annual altered, and that is in the numbering of its pages. It has a profusion of supplements, so that it often happens that there are six or eight unnumbered supplement pages between two of the ordinary pages which have consecutive numbers. The result is that, turning anything up from the index is a lengthy and provoking operation. It should surely be possible to number the whole book right through.

The work, which is substantially bound in a cloth cover, sells at 5s. nett.

A Varnish Focussing Screen.

I FIND that a focussing screen can be made in the following way, which, if not as permanent in character as ground-glass, seems in every other respect to be as effective. It has the advantage that it can be extemporised where ground-glass is not to be got, while it gives a very fine grain. A little "spirit varnish" is thinned down with methylated spirit, and a piece of plain glass coated with

it, just as a negative is coated, warming the glass beforehand and drying it by heat afterwards. Ordinary negative varnish made with spirit will do.

When the varnished glass is perfectly dry, by lightly rubbing the surface of the varnish with the tip of the finger a white powdery surface can be given to it, upon which the finest focussing can be done.—W. H. T.



REGULATIONS.—(1) Envelopes must be marked "Query," and the "Enquiry Coupon" found elsewhere must be enclosed. (2) The full name and address in addition to a *nom-de-plume* must be given. (3) Only one question on one subject is allowed in each letter. (4) Prints may be sent for criticism, but a separate coupon must be sent with each print, and a stamped addressed envelope (not loose stamps) for their return. Queries are dealt with in strict rotation in the order received. Only "Urgent Apparatus" queries will be dealt with by post, for which purpose a stamped envelope must be enclosed.

A.R.T. (Irthlingborough).—We cannot find it in any of our lists.

J. REES JONES (Abingdon).—We expect to publish it in this issue.

A. H. ROBINSON (West Ayton).—Clarkson, optician, Colchester, is the agent.

WATERMARK (Manchester).—We have handed your letter to our publishers.

OUZEE PUM (Bournemouth).—No. There is no satisfactory way of doing what you want. Many thanks for the note on stripping negatives.

A.H. (Clapham).—Our preference would be for A; other things being equal we like wood better than metal. In other respects there is little to choose.

J.M. (Lancaster).—Raphael Tuck and Co., Raphael House, London, E.C.; the Rotary Photographic Co., New Union Street, Moorfields, London, E.C.

F. JAMES (Palmer's Green).—Many thanks for your note, but you have misread the advertisement. The P.O.P. is quite distinct from the plates.

S. J. WATSON (Barnes).—Coxin, supplied by Messrs. W. Butcher and Sons, Camera House, Farringdon Avenue, E.C., is probably what you have heard of.

IVORY (Oswestry).—Fallowfield, 146, Charing Cross Road, London, W.C., will supply all the materials necessary and full particulars for their use.

L. W. BRIDGMAN (Torquay).—The *modus operandi* will be found with the formula in our issue for September 29th. What more is it that you wish to know?

YORK (Middlesbrough).—Omitting the bromide altogether, the factor is 12. We do not recommend the addition of the bromide; otherwise the formula is satisfactory enough. The factor can only be found by trial.

MARKGOLD (Crowborough).—We can only suppose that it means one who is accustomed to give public exhibitions with the apparatus. There is a good deal to learn about any instrument of that sort.

W. GLADSTONE (Canada).—Gently rubbing with a tuft of cotton wool moistened with alcohol (wood spirit) and squeegeed almost dry will lighten them. The wool must not be too wet, and must be changed as it gets blackened with the silver that rubs off.

ABOE (Roxburgh).—Ross Series V. Homocentric No. 3. The sharpness due to the distance between the lengths of the base and the hypotenuse depends entirely on the size of the stop and the focus of the lens. The make of lens has no influence on it at all.

J. LUCAS (Hull).—It is most economical to use what is called an enclosed arc, as this gives a violet coloured flame much more powerful than the ordinary arc lamp, photographically speaking. We presume you do not think of trying the incandescent electric light, which is of no practical use for the purpose.

DOUBTFUL (Harborne).—It is not so easily settled as you hope. Neither of the signs named is a guide; between the two lies the correct period. At first you had better go on until the highest lights show quite plainly at the back; you will soon learn to judge density better, or will take up time development, which is best of all.

LECLAIRE (Brecknock Road).—You have probably got hold of a portrait lens, in which either the back lenses are improperly placed, or have been removed and replaced by something quite unsuitable. You may depend upon it the lens as it left the maker was intended to be used as a whole for portraiture. Your only plan will be to submit it to an expert for examination and report.

MISS EVA RICHMOND.—The decomposition of the sulphide solution would not be likely to cause blisters but to cause weak yellowish prints. There is no need to mix up fresh if your old solution works perfectly, but it does not always keep as well as it has done with you, and it is better to make it fresh from time to time than to risk spoiling a good enlargement. There is no other reason for using it fresh than that given above.

WALTONIAN (Epsom).—Double the exposure for each stop in succession.

H.M.T. (Newcastle).—You were answered on page 581 of our issue for November 17th.

MAHA (Bayswater).—No. 2 is satisfactory. No. 1 we have not had any opportunity of trying.

J.H.C. (Perry Barr).—So far as we are aware the method described in the article is the only one.

J. W. CHAMBERS (Dudley).—The necessary exposure is increased to approximately four times as long.

PEDRO (Clydebank).—There is none. There was a monthly, but we cannot hear that it is now in existence.

TEE CEE (Finsbury Park).—Circumstances decide; but as a general rule we hold it strangled in front of us, with both hands, stooping over it a little.

PAPER (Battle).—The blisters have been caused by the solutions used not being all at the same temperature. There is no remedy; they must be prevented.

BIFLEX (Birmingham).—The great majority of press photographers use 5 x 4 or half-plate reflex cameras; so that type would seem to be the most suitable.

MISS MENNIE (Warwick Square).—The print is not very suitable for reproduction, as owing to under-exposure of the negative, all the shadow part is much too black.

ANXIOUS (Hockley).—Different workers have different methods, but the one most generally employed is the use of a very light background and then airbrush work on the print.

ENQUIRER (Farnham).—We are sorry we cannot furnish you with "the names and addresses of trustworthy editors of children's illustrated magazines in U.S.A. and Canada."

GLAZE (Ystradgynlais).—There is nothing better than ferro-type sheets or pulp boards, which any dealer will supply. The dried prints are simply rewetted and squeegeed down.

H. JORDAN (Balham).—The editorial on page 524 of *Photography and Focus* for November 3rd dealt fairly fully with the subject. We do not know of anything to add to what we said then.

C. GREENWOOD (Manchester).—So far as our recollection goes we have published nothing of the kind, and we certainly do not know of anyone who makes them. If they are obtainable they would be able to tell you at Chapman's.

MISS HOW (Lee).—The prints have been returned. The stains are due to some chemical impurity, undoubtedly, but what that is we cannot say. It has reached them after washing, probably in the form of dust, while the prints were wet.

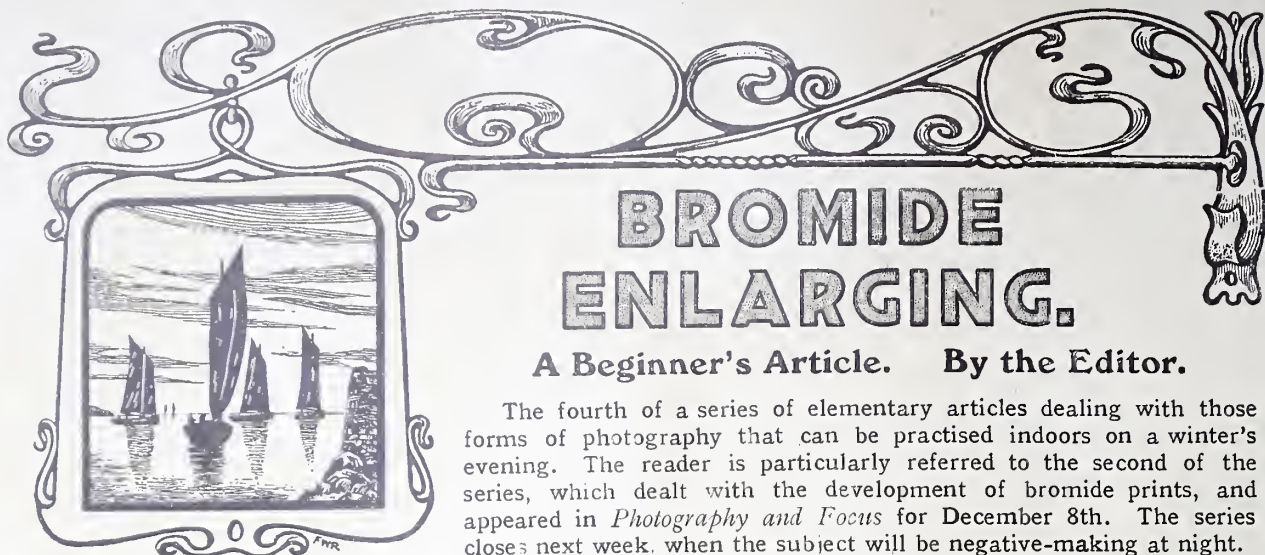
W. H. PRESTON (Weaste).—The negative arrived smashed to bits; but as far as we could learn from the pieces it was very greatly under-exposed—four yards rather than four inches would be required—and then had been badly fogged during development.

MRS. BARR (Longhope).—In the absence of details we cannot say where you are wrong; but it is most likely to be under-exposure. Try four times as long and see if results are better. We presume you can make good gaslight prints by contact, so that you know how they should develop.

W. WHITEWAY, JUN. (Blackheath).—The negative has had its two ends fogged by light passing through the lens and reflected from the sides of the camera. A hood or shade to the lens, so as to reduce the area it illuminates to one only a little larger than the plate itself, will put things right; perhaps a coat of dead black inside the camera will do it.

AYR (New Prestwick).—The apparatus is no doubt right enough. The slides sent were apparently incorrectly exposed or developed or both: the plates suffering from stain and chemical fog. We should advise you to stick closely to makers' instructions until you can make a technically good slide by contact. You should then find no trouble with your reducing apparatus.

COLUMBO (Leyland).—The trouble is due either to under-exposure or to over-development. If you are sure the exposure is correct you must reduce the factor until you get the character of negative you require. Probably nine or ten will be about right; but if you make a note of the time of appearance and the total time of development every time you develop a plate, keeping to the same developer, a very few trials will give you exactly what you want.



A Beginner's Article. By the Editor.

The fourth of a series of elementary articles dealing with those forms of photography that can be practised indoors on a winter's evening. The reader is particularly referred to the second of the series, which dealt with the development of bromide prints, and appeared in *Photography and Focus* for December 8th. The series closes next week, when the subject will be negative-making at night.

THE development of bromide prints was dealt with a fortnight ago (*Photography and Focus*, December 8th, page 626), and need not be considered afresh, since the treatment of an enlargement on bromide paper, apart from the actual exposure, is precisely the same as the treatment of a contact print. The subject of this article, therefore, is the exposure of bromide enlargements.

The making of an enlargement will be better understood when it has been pointed out that it is actually re-photographing. The negative to be enlarged is fixed up and evenly illuminated from behind, and a photograph is taken of it either with a camera and lens or with something which serves the same purpose, the photograph being taken not on a glass plate, but on a piece of bromide paper. As the original is a negative, the image on the bromide paper is a positive; and as we want the picture to be larger than the original, the distance of the bromide paper from the lens must be greater than the distance of the negative from the lens.

The simplest form of apparatus for enlarging, and the cheapest, is that known as a "daylight enlarger," which may either be of fixed focus (in which case the degree of enlargement is the same under all circumstances) or may be adjustable. This form of apparatus is used vertically; the negative being at the top, it is illuminated by the direct light of the sky shining down upon it; beneath it is the lens, which is fixed in the centre of an opaque partition in the enlarger; and beneath this again is the bromide paper. When the lens is of fixed focus, it has one fixed stop in it, and there is no need to take the aperture of the lens or the degree of enlargement into consideration, since these are unalterable. All that has to be done is to take the enlarger into the dark room and load it (negative at one end, bromide paper at the other), carry it out into the open air, set it on end, and make the exposure.

Direct sunshine must not fall on the negative when this is being done; and in order that the exposure may be properly timed an exposure meter of some sort should be placed beside the enlarger, to measure the strength of the light falling on it.

To ascertain the correct exposure, we may make a trial enlargement in strips, exactly as we made a trial print. It may seem wasteful to use an entire large sheet of the bromide paper for such a purpose; but the beginner will not find it so. It is well to get a clear idea as soon as possible, both of the approximate exposure required and of the appearance of under, correct, and over-exposure, and both these can be learnt from the trial sheet. A piece of cardboard is required for the purpose, and is pushed gradually over the negative, an inch or less at a time. The whole negative should be uncovered for, say, ten seconds. The card is then pushed over it a little and another ten given, then twenty, forty, eighty, and a hundred and sixty seconds in the same way. This range of exposures will be almost certain to include the correct one for a daylight, fixed focus enlarger; but where the negative is a dense one, the lens stopped down a great deal, and the degree of enlargement is considerable, the first exposure may be a minute, the subsequent additional exposures being one, two, four, and eight minutes, so that the enlargement actually receives in different parts one, two, four, eight, and sixteen minutes exposure.

The time taken for the paper in the exposure meter to darken to the standard tint, as it lies beside the enlarger, should be carefully noted, so that the exposure may be repeated exactly at any time, no matter how different the light.

There is another method of daylight enlarging which can be used when a room can be made completely dark. The window is blocked up entirely, except for an opening the size of the negative or thereabouts. Outside this opening is fixed, at an angle of 45° with the vertical, either a mirror reflecting the diffused light of the sky or a sheet of white card. The negative is placed in the camera in which it was taken, putting it in the place of the ground-glass, and the camera is then fixed up so that the negative comes up against the opening in the window, and the lens points into the room. Any light which might leak in round the opening is stopped out by means of a focussing cloth. In front of the lens and at a suitable distance from it is fixed a drawing board, on which is pinned a sheet of white paper, on which the image is

focussed. When this has been done, the lens is capped, a sheet of bromide paper is substituted for the white paper, and the exposure is made. A trial series of exposures can be made in this case by holding the card between the lens and the bromide paper, as near the latter as possible, so as to get a sharp line of demarcation between each exposure. For advanced workers, where it becomes desirable to shade different parts of the enlargement while it is being made, this method has advantages which it shares only with the enlarging lantern.

For winter evening enlarging the lantern is much the most convenient and satisfactory apparatus to use. Unfortunately, it is also the most costly form of enlarging arrangement; but when the original negatives are not larger than quarter-plate, its cost is not prohibitive even to the amateur of very limited means. An enlarging lantern differs from a "magic lantern," or lantern for showing slides, only in detail. In principle it is the same. For enlarging, the negatives are generally larger than slides, so that the condenser has to be bigger. It is also considered more important in enlarging to prevent any stray light from getting out into the room, so the enlarger is more light-tight, although in this respect both ought to be perfectly light-tight. In slide projection much has to be sacrificed in order to get the picture as brilliant as possible; in enlarging this does not matter very much, as at the most it will only make a difference of a few minutes in the exposure.

In the choice of an illuminant for the enlarging lantern, the photographer is governed by circumstances. In the country either an oil lamp or an incandescent gas mantle heated by a spirit burner will be found most useful. In towns incandescent gas or an electric arc or a Nernst electric lamp is more convenient. Acetylene can be used if this is preferred for any reason. The character of the illuminant should not affect the quality of the enlargement in any way; and excellent work can be done with any of these.

The procedure in making an enlargement with a lantern is very simple. When the lantern has been set up in front of a drawing board, on which has been pinned a sheet of white paper, the negative is put into the carrier and focussed on the paper to the size required. When this has been done approximately, the negative is taken out and the light adjusted until the paper on the drawing board is seen to be perfectly evenly lit. The position of the light in the lantern is governed by the focus of the lens used and the distance of the enlarged image, so that the focussing has to be done, at any rate approximately, before adjusting the light. When the light is right, the negative is replaced and the fine focussing is done. The largest stop that



A CONFIDENTIAL CHAT.

By T. C. BEYNON.

Awarded the Silver Plaque in the Special Subject Competition.

will give a sharp picture is the one to use; it is a great mistake in enlarging to stop down too much, as it introduces other difficulties. If the lens in the enlarger is a rapid rectilinear, $f/16$ will generally be found to be small enough, while if it is one of the modern anastigmats there should be no need to stop down beyond $f/8$. The lens is generally provided with a red or yellow glass cap, which allows enough of the picture to be seen on the easel to make it easy to pin up the bromide paper in the correct position.

Glass-headed dark room pins will be found the most convenient method of attaching the bromide paper to the drawing board or easel. But in some enlargers the paper is pressed up behind a sheet of glass. The glass, if clean and good, will not be found to affect the definition in any way. Focussing is easiest done by concentrating attention on any little pinholes or spots on the negative. A pinhole has a perfectly sharp boundary, and it is therefore much easier to note when it is quite sharp than it is with some detail on the negative: this may not be perfectly focussed in the original, or may not have a very well defined edge in



PORTRAIT OF A LADY.

BY ALFRED AND MARIE BRACEWELL

Awarded the Silver Plaque in the Special Subject Competition.

any case. The final focussing should be done with that stop in the lens which it is intended to use.

When the enlargement is to be made from a film negative, this should be placed between two pieces of clean glass, which are then temporarily bound up like a lantern slide. If the negative is smaller than the glass, the clear space round it should be blocked up with a black paper mask, to avoid any risk of fogging the bromide paper with reflected light. This applies also whenever an enlargement is being made from a comparatively small portion of a negative; the rest is covered over with a mask, so that the image on the screen only includes a little more than is to fall on the bromide paper.

Once again let me repeat that the only way to ascertain the correct exposure is by a trial. The beginner very naturally feels dissatisfied with such a statement. "Can't you give me any idea of the exposure required?" he asks. "None to be of much service" is the only possible reply. With an enlarging lantern and an R.R. lens, with the stop marked $f/16$, enlarging from quarter-plate to 12 by 10 on rapid

bromide paper, the light being incandescent gas, the exposure may range from fifteen seconds to several minutes.

The beginner will do well to be very careful in the selection of the negative for his first attempts at enlarging. Many negatives that will give good contact prints are not suitable for enlarging at all, as the contrast is always greater in enlarging, and the final result therefore looks harsh. It is for this reason that we so often see enlargements with quite blank white high lights, without any trace of detail on them at all. The negative should be thin and clear. It should have detail plainly visible in the deep shadows, and if it is just too weak to give a bright print on P.O.P. it is exactly what is required to make a first-rate enlargement.

Enlarging can be done in a room with a fire, provided the fire is not a very bright one, and it is not allowed to shine direct on the bromide paper. It should be remembered that the greatest danger of fogging the bromide paper is while it is pinned up being exposed, because it is opened out for some time to any stray light that may be about. A yellow glass in the lantern which might be perfectly safe for developing might fog the paper if the light were allowed to fall on it during the whole of a long exposure. The safe plan is to exclude all the stray light possible, so as to run no risks at all.

The development of bromide enlargements, although the same as that of contact prints, may call for a word or two. Owing to the size of the enlargement, the beginner might find it difficult to get it covered with developer quickly and evenly, without using a quite unnecessarily large quantity of liquid. To prevent this, the enlargement may be allowed to soak for half a minute or so in clean water. When it is quite limp, the water

may be poured off and the developer poured on. An enlargement while being developed will not look quite so strong in contrast as a small contact print, although actually the contrast may be the same; or even greater. This is due to the greater separation of the contrasting light and dark parts.

Enlarging presents no great technical difficulties which need deter the beginner from attempting it. The process is little, if any, harder than contact printing on bromide paper; while the results allow even tiny pocket-camera negatives to provide large and effective pictures for framing. Every user of a hand camera should practise enlarging in winter, so that he may make the best use of his negatives. Very often a comparatively small part of a negative may be enlarged up to make a better composition altogether than the whole of the subject on the plate; while when dealing thus on a larger scale than in contact printing it becomes much easier to modify different parts, by shading during exposing and so on. To those who have not yet taken up enlarging, therefore, my advice would be, "Try it."

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ADVERTISEMENTS.—All communications on advertisement matters should be addressed: The Advertisement Manager, PHOTOGRAPHY AND FOCUS, 20, Tudor Street, London, E.C. All copy for displayed advertisements for the issue of any particular week must reach Tudor Street by the first post on Monday morning in the week previous.

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SALE AND EXCHANGE (for Amateurs only).—½d. per word, minimum 9d.

PROFESSIONAL AND TRADE.—Three words 2d., minimum 1/-.

All advertisements to be inserted on these terms must be accompanied with remittance. To ensure insertion, letters should be posted in time to reach the offices, 20, Tudor Street, E.C., not later than first post on Wednesday.

BOX NUMBERS.—For the convenience of advertisers, letters may be addressed to numbers at the office of the paper. When this is desired, 2d. will be charged for registration, and three stamped and addressed envelopes must be sent for forwarding replies. Only the number will appear in the advertisement. Replies should be addressed: "No. 000, c/o PHOTOGRAPHY AND FOCUS, 20, Tudor Street, London, E.C."

DEPOSIT SYSTEM.—Persons who hesitate to send money to unknown persons may deal in perfect safety by availing themselves of our Deposit System. If the money be deposited with PHOTOGRAPHY AND FOCUS, both parties are advised of this receipt, and upon intimation of the arrival and acceptance of the goods, the money is forwarded, less a charge of 1/- for registration. The time allowed for a decision after receipt of the goods is three days. For all transactions exceeding £10 in value, a deposit fee of 2/6 is charged. Cheques and Money Orders should be made payable to the Proprietors, MESSRS. ILIFFE AND SONS LIMITED, and addressed to them at Coventry.

PUBLISHING NOTICE.—Communications for the Publishers should be addressed: ILIFFE AND SONS LIMITED, 20, Tudor Street, London, E.C.

EDITORIAL NOTICES.

ADDRESS.—All communications for the Editor should be addressed: The Editor, PHOTOGRAPHY AND FOCUS, 20, Tudor Street, London, E.C.

TO CONTRIBUTORS.—The Editor will be glad to consider original up-to-date manuscripts on photographic subjects. All contributions must be typewritten, or in very legible handwriting, on one side of the paper only, and should bear the name and address of the sender. Letters or communications arising out of matters already appearing in the paper are not paid for. The Editor disclaims legal responsibility for the safety of matter submitted to him, but he will endeavour to return rejected manuscripts, etc., when a stamped addressed envelope is enclosed for that purpose. No notice whatever can be paid to communications without the name and address of the sender, not necessarily for publication.

PRINTS FOR CRITICISM.—Readers sending prints for criticism or advice are notified that in all cases it is understood that by so doing permission is given for their reproduction, without fee, in PHOTOGRAPHY AND FOCUS.

PRINTS FOR REPRODUCTION.—Reproduction fees are only paid by arrangement beforehand. The sending of a print, without any condition stated, will be taken as permission to reproduce it without fee. The Editor will be glad to consider for publication, with or without letterpress, photographs of special interest, on terms to be arranged.

PAYMENTS.—Articles and illustrations are paid for on acceptance.

INTERVIEWS.—The Editor will be at 20, Tudor Street, on Wednesdays, between the hours of 9.30 and 11.30 a.m., but can only be seen at other times by appointment.



THE NORWICH and District Photographic Society holds its exhibition from February 16th to 20th. Entries close February 2nd. The prospectus is ready, and can be obtained from Mr. J. T. Tanner, of The Lodge, Bowthorpe Road, Norwich.

ON FLOWER PHOTOGRAPHY. Mr. E. Seymour told the Chelsea and District Photographic Society that he did not use a colour screen on account of the risk of movement during the prolonged exposure. He used Imperial Pyro-Soda as the developer, mixing six parts of No. 1 with one part of No. 2, but not adding any bromide.

THE NOBEL PRIZES. Amongst the Nobel prize-winners this year we are glad to note the name of Professor Gabriel Lippmann, of Paris. The Lippmann process of colour photography is well known to our readers; what may not be so well known, however, is that Professor Lippmann, who occupies a chair at the Sorbonne, has acquired great distinction in several branches of physics, and especially in electrical research. The Nobel prizes take the form of a gold medal and a most substantial sum of money.

Books for . . . Photographers.

Photography for All.

By W. JEROME HARRISON, F.C.S.
Covers the whole ground of photography as practised in its most popular forms.
Cloth Bound 1/- nett. Post free 1/2.

Practical Slide Making.

By G. T. HARRIS, F.R.P.S.
All the different processes described at first hand by a practical slide maker.
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By W. L. F. WASTELL AND R. CHILD BAYLEY.
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By W. J. WARREN.
A complete, practical, concise and well written treatise on what is the finest of the printing methods of pure photography, with facsimile developed and undeveloped platinum print.
Cloth Bound 1/- nett. Post free 1/2.

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By R. PENLAKE.
Over 300 Formulæ, Hints, etc. Reliable and up-to-date.
6d, nett. Post free 7d.

A full list sent on receipt of a postcard.
ILIFFE & SONS LTD.
20, TUDOR ST., LONDON, E.C.

THE SCOTTISH SALON. The private view and reception of delegates is on December 31st, the opening ceremony being on January 1st. The entries, we hear, exceed a thousand in number.

THE AYR Amateur Photographic Society holds an exhibition from the 11th to the 16th January in the Drill Hall, Alloway Street, entries closing December 30th. The honorary secretary is Mr. Robert Weir, of 17, Castle hill Road, Ayr.

THE NOTTINGHAM CAMERA CLUB exhibition is fixed for March 17 20 Arrangements have been made for collecting from the Birmingham and forwarding to the Sheffield exhibitions free of charge. The exhibition secretary is Mr. E. L. Kent, of 5, Radcliffe Mount, West Bridgford, Notts.

DEVELOPER PRICES. Messrs. Fuerst Bros. announce that after January next Pushaxe will be sold at 1s. 2d., 1s. 10d., and 3s. 3d. for the 3½ oz., 7 oz., and 18 oz. bottles respectively. Hauff's cartridge developers, amidol, metol, glycin, and ortol, will be sold at 1s. 10d. and 3s. per box of six and ten cartridges respectively.

THE TANK DEVELOPMENT OF SLIDES was demonstrated before the Preston Camera Club by Mr. T. H. Greenall. He recommended the use of a dilute developer in the tank, the one he employed bringing out all the detail in twenty-two minutes. The slide was then very soft, and the necessary contrast was given in a developer of normal strength used in a dish.

BROMOIL. Lecturing before the Crippllegate Photographic Society, Mr. Mortimer said that to ensure success it was necessary to have good quality in the original print. It must be of the very best. Amidol seemed to be particularly suitable as the developer, and smooth matt surface papers were to be preferred. The best support for the print during pigmenting was a handkerchief placed on the top of some wet blotting-paper.

MR. C. F. INSTON DEMONSTRATING OIL PRINTING before the Hull Photographic Society, said he used the Illingworth No. 125 double transfer paper. He provided the negative with a safe edge and used paper about an inch larger. The sensitiser he employed was made by taking one ounce of a ten per cent. solution of ammonium bichromate and adding to it an ounce and a half of methylated spirit, which sufficed for eight whole plates. For a brush he used three or four folds of old flannel folded over a piece of glass two inches wide, and held by a rubber band. The brushes he recommended were Nos. 1, 6, and 14. He held the brush at the top and gently danced it on the print, starting on the shadows. The ink was of a lithographic type and was spread on an old negative, very little being used. On taking the ink off the slab with a brush he first tried it on a piece of opal.

"Wellington"

XMAS
GREETING



PLATES & PAPERS
& FILMS

MILLER'S BRUSHES for the oil processes. Mr. Robert Ballantine, of 99, St. Vincent Street, Glasgow, has been appointed sole agent for Scotland.

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"DEUTSCHER CAMERA-ALMANACH" is the annual established by Fritz Loescher, and is now in its fifth year. It is very fully illustrated with pictorial photographs, contains many contributed articles, a list of German photographic societies, and a record of the year's progress. It is published by Gustav Schmidt, of Berlin, at 4 marks in paper and 5 marks in cloth.

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THE GLASGOW and West of Scotland Amateur Photographic Association holds its exhibition from February 1st to 13th in the rooms of the Association, 180, West Regent Street, Glasgow. Entries close January 20th. This being the twenty-fifth year of the society's existence, the exhibition is being strengthened in various ways. There is an open class, and a specially-designed plaque is being prepared. The entry forms are ready, and can be obtained from the honorary secretary, Mr. James McKisack, of 68, West Regent Street, Glasgow.

ENAMELLING PRINTS.

THERE are many photographers who wish to secure the highest possible gloss upon their prints. To do this, the print must be "enamelled." The usual plan is to treat plate-glass with French chalk, polish it, and coat it with a collodion. The print and the glass are immersed in a weak warm solution of gelatine, the print is squeezed down on the collodionised surface, and the glass is placed aside to dry. When dry, the print is stripped off, and bears a collodion surface with all the polish of glass itself. The method was described at length, with full working details, in *Photography and Focus* for August 18th, 1908, on page 303.

Another plan for obtaining the same result was given recently in the "Bulletin of Photography." The glass is coated with collodion, as above described, and when this is dry, a varnish is poured over it of the following composition:

Gum juniper	...	38 grains
Orange shellac	...	10 "
Fiddle resin	...	5 "
Camphor	...	5 "
Methylated spirit	...	1 ounce

The plate is allowed to dry—indeed, it need only dry at the edges—and then the print, which has been soaking previously in methylated spirit, is laid face downwards on the varnished surface and squeezed into contact, taking great care to avoid airbells and to get perfect contact all over. A pad of blotting paper is put on the print, and on top of this another piece of glass and a weight. When thoroughly dry, a cut is made all round the print, down to the surface of the glass, and the print peeled off. It is said that this method gives a polish beyond which nothing can be desired.

THE GADSBY ART MOUNTING PAPERS. Mr. Frank Gadsby, of 5, Braunstone Gate, Leicester, sends us a sample book of these, containing no fewer than 170 varieties. The choice of greys and browns is particularly rich and varied, and those who go in for this very effective and tasteful method of mounting will find that an investment of sixpence, for which the sample book will be sent post free, will be one that is very well worth making.

ALKALIES IN DEVELOPERS.

THE active agent in most modern developers, exclusive of amidol and kindred compounds, is only effective when the solution is distinctly alkaline. The actual alkali employed is not very important, provided too much of it is not present, and provided, of course, that it makes the solution alkaline enough to work.

The proportion of alkali required for the purpose varies according to the nature of the substance used, and it may, therefore, be convenient if we quote the table given by Dr. Mason in the "Bulletin of Photography" recently, and show how it may be used. The following is the table:

Potassium hydrate (caustic potash)	...	112.
Sodium hydrate (caustic soda)	...	80.
Potassium carbonate	...	165.
Sodium carbonate (crystals)	...	286.
Sodium carbonate (anhydrous)	...	106.

Ammonia is not given on account of its general uncertainty, and, indeed, it is not used at all now, except with pyro, and even pyro-ammonia is rapidly going out of fashion. Caustic lithia as an alkali in a photographic developer is more of a curiosity than of any practical importance.

The use of such a table is a simple matter. If we are accustomed to employ any one of the alkaline compounds mentioned in it, and we wish to substitute for it one of the others, to find out how much of the new substance is required to replace a given amount of the old, we multiply the quantity of the old by the figures opposite the new and divide the result by the figures opposite the old.

Let us give an example. A photographer we will suppose has been in the habit of making up his developer with 240 grains of sodium carbonate crystals, and finds, on an emergency, that he has none left, but that he has plenty of potassium hydrate. To find out how much potassium hydrate he must use to replace his 240 grains of carbonate, he multiplies 240 by 112, getting 26,880. Dividing this by 286 he gets 94 (nearly). Instead of 240 grains of sodium carbonate, therefore, he may use 94 grains of potassium hydrate.

It should be pointed out that this only deals with relative developing power. As a matter of fact, the potassium hydrate would have a much more powerful action on the film of gelatine on the plate than would the sodium carbonate, and might soften it and make it frill.

A LOT, INDEED! Mr. J. C. S. Mumery, in his presidential address to the Royal Photographic Society, stated that he recently inspected a lot, at an auction sale, which consisted of over sixteen hundred distinct postcard photographs of Phyllis and Zena Dare.

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THE RAJAR CAMERA for the month of November has been awarded to W. R. Kay, of Highfield, Itchen, Southampton. The Rajar paper on which it was made was bought from W. Martin, chemist, High Street, Southampton.

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THE COWES CAMERA CLUB holds its exhibition on February 10th and 11th, 1909. The meetings of this society are now held on the second and fourth Wednesdays from October till March inclusive, and on the first Wednesdays from April to September. Mr. E. Vincent, of 4, High Street, Cowes, has been re-elected honorary secretary.

SUBMARINE PHOTOGRAPHY.

SUBMARINE photography has engaged the attention of an engineer, M. Peau, for the past twelve years. M. Peau, says the "Photographic Times," recently gave an outline of the history of this branch of work before a Belgian society. In 1866 Herr Bauer took photographs through the windows of a submarine boat, called the "Sea Devil," using as the illuminant a powerful lamp and reflector within the boat. In 1893 Boutan used a photographic diving apparatus, with daylight in shallow water or with magnesium burning in oxygen at greater depths. M. Boutan in a lengthy and fully illustrated article in *Photography* (January 3rd, 1901, p. 11) gave details of his method.

Peau has been working at Havre, where the water, except near the surface, is very muddy. The camera used is contained in a cylinder of sheet steel, 20in. long, 10½in. in diameter. The front is protected by a glass plate. The focussing and plate changing are done by means of a tube at the back. The weight of the apparatus complete is about four pounds, but it is loaded with additional weights of from twenty to forty pounds to sink it when in use.

The apparatus is painted as near the colour of the water as possible, so as not to arouse the inquisitiveness of the fishes. As everything is usually in motion, instantaneous exposures have to be made. Only the foreground is photographed, the distance appearing as an opaque veil. Light is furnished by flashlights in a thick glass globe with a tube reaching to the surface. The shutter and flash work simultaneously.

To photograph crustaceans, i.e., crabs, lobsters, etc., bait is used to attract them. Polyps and medusae are the most difficult to photograph. Interesting are the sunken objects which soon are so covered with a crust of shell fish as to become almost unrecognisable.

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Perfectly Clean Prints.
No Smudges.
No Fine Black Lines.
No Cleaning.
BEAUTIFUL SEPIA TONES.

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Free from Surface Markings.

THE ONLY PERFECT
GLOSSY GASLIGHT
PAPER IN THE
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6d. or 1/-
Packets,
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sent
Post Free
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Delivery
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The Very Best Quality.

With Greatest Satisfaction to Users.

NEGATIVES WANTED.

WE want about a dozen Quarter or Half-plate Negatives for Advertising Purposes, including pretty Child Studies, and any good striking subjects, landscape or otherwise. Send prints, with price of negative marked on back, and enclose stamp for return if required.

The Birmingham Photographic Co., Ltd., Criterion Works, Stechford, Birmingham

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OUR COMPETITIONS

H.W.P.

BEGINNERS' COMPETITION.

Open to all photographers who have never taken an award.

PRIZES.

First Prize.—A signed copy of "The Complete Photographer," a half-guinea work by Mr. Child Bayley, now in its second edition.

Second Prize.—A free subscription to *Photography and Focus* for twelve months.

One or more certificates of honourable mention will also be awarded.

RULES.

(1) Each competitor can send as many prints as he likes, but each print must bear on the back the coupon, published each week, the name and address of the sender, the title of the picture, and no other writing whatsoever.

(2) No print will be eligible that is larger than 5½ in. x 3½ in. (postcard size) or 5 in. x 4 in.

(3) No print must be mounted.

(4) No handwork other than simple spotting is permitted on negative or print, nor shading or dodging of any kind. It is distinctly understood that entry in the competition implies a declaration by the competitor that this rule has been complied with; and in case of dispute, the editor shall have the right to call for the negative from which the entry purports to be a simple direct contact print.

(5) No prints will be returned, and no correspondence with regard to the competition can be undertaken.

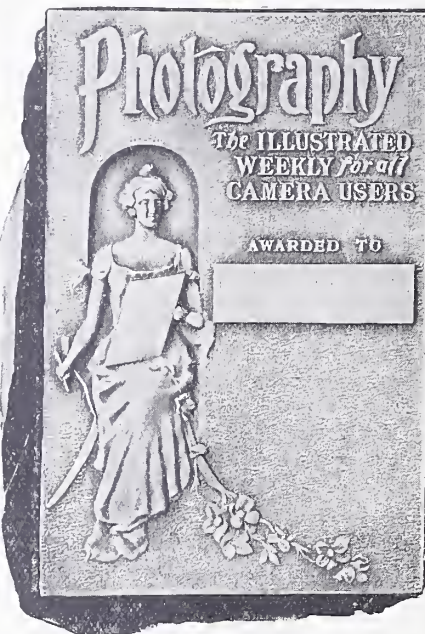
(6) The publishers of *Photography and Focus* shall have the right to reproduce, without payment, any of the prints sent in, winning or otherwise. But except the winning prints, the names of competitors of other prints that may be reproduced will not be published without the competitor's consent.

(7) All entries must be addressed "Beginners' Competition," the Editor of *Photography and Focus*, 20, Tudor Street, London, E.C., and must be delivered at that address by the first post on the closing date at the very latest.

CLOSING DATE.—Thursday, Dec 31st.

XMAS CARD COMPETITION.

For particulars and rules see page 670.



ADVANCED WORKERS' PRINT COMPETITION.

PRIZES.

First.—"Photography" Silver Plaque.
Second.—"Photography" Bronze Plaque.
Third.—"Photography" Bronze Medal.

One or more certificates of honourable mention will also be awarded.

RULES.

(1) All photographs must be sent addressed "Advanced Competition," the Editor of *Photography and Focus*, 20, Tudor Street, London, E.C., postage paid, to reach there not later than the first post on the closing date, and must contain a stamped addressed envelope or label (not loose stamps) if they are to be returned.

(2) Each photograph must be mounted, but not framed. Prints in slip-in mounts are not eligible. Each must bear on the back the name and address of the sender and the title of the picture. No letters or other communications must be enclosed with the prints. Every print must bear attached to its mount a coupon for the competition of the month, which will be found in each issue of the paper.

(3) Each photograph must be the work of the competitor as regards selection and arrangement of the subject, exposure and development of the negative, and printing, development or toning, and mounting of the print.

(4) The prints which are accompanied by stamped envelopes or labels will be criticised by post, and the editor shall have the right to reproduce any of the prints, winning or otherwise. The awards will be made a fortnight after the closing date.

(5) Awards may be increased or withheld at the absolute discretion of the judge, and in all cases of dispute the decision of the editor will be final.

(6) There is no restriction as to the eligibility, except as set forth in these rules, and except that the same negative must not be used more than once in the competition. That is to say, that a print from it once submitted, all further prints, however varied, are ineligible.

(7) Neither editor nor publishers of *Photography and Focus* shall be held in any way responsible for the safety of prints or for their return to the competitors.

(8) The sending of a print to the competition will be regarded as a declaration to the effect that it is eligible under these rules, and that the competitor agrees thereto.

CLOSING DATE.—Thursday, Dec. 31st

SPECIAL SUBJECT COMPETITIONS. OPEN TO ALL READERS.

PRIZES.

First Prize.—"Photography" Plaque in Silver.
Second Prize.—"Photography" Plaque in Bronze.
Third Prize.—"Photography" Medal in Bronze.
One or more certificates will also be awarded.

RULES.

(1) The subject of each photograph entered must be that announced for the particular competition.

(2) Each competitor can send as many prints as he likes, but each print must bear on the back the name and address of the sender, the title of the picture, and no other writing whatsoever. Each print must have attached to it a coupon for the competition of the month, which will be found in each issue of the paper.

(3) No print must be mounted. No handwork other than simple spotting is permitted on negative or print, nor shading or dodging of any kind. It is distinctly understood that entry in the competition implies a declaration by the competitor that this rule has been complied with; and in case of dispute, the editor shall have

the right to call for the original negative from which the entry purports to be a simple direct contact print.

(4) No prints will be returned, and no correspondence with regard to the competition can be undertaken.

(5) The publishers of *Photography and Focus* shall have the right to reproduce, without payment, any of the prints sent in, winning or otherwise. But except the winning prints, the names of the senders of other prints that may be reproduced will not be published without the sender's consent.

(6) All entries must be addressed "Special Subject Competition," the Editor of *Photography and Focus*, 20, Tudor Street, London, E.C., and must be delivered at that address by the first post on the closing date at the very latest.

SUBJECTS AND CLOSING DATES.

A subject suitable for use as a Christmas or New Year Card. Closes Thursday, December 31st.

A Winter Landscape. Closes Saturday, Jan. 30th, 1909.

A Portrait by Artificial Light. Closes Saturday, Feb. 27th, 1909.

RAJAR PRIZE COMPETITION!

£8:3:6 CAMERA
Every Month! **for a PRINT** Every Month!
or ENLARGEMENT.

Every month we offer a Rajar 1-plate Folding Pocket Camera fitted with Unicum Shutter, and dark slide of the finest manufacture and with one of the best Anastigmatic Lenses, viz.:

Beck-Steinheil Orthostigmat LENS F/6.3

value £8 3s. 6d., for the best Print or Enlargement on any of the Rajar Papers or Postcards.

ONE CONDITION ONLY.

There is one condition only, and that is, the Paper must be purchased from a Photographic Dealer or Chemist during the same month that the print is sent in for competition. If not in stock your dealer will be pleased to obtain for you. No entry forms are required. The name of the winner will be announced in the Photographic Papers.

INSTRUCTIONS.

One or more prints may be entered.

Write your Name and Address clearly on the back of the Prints, also the Name and Address of the Dealer or Chemist from whom the paper was purchased, and date.

Prints should be unmounted, and may be of any size.

All prints, including winning prints, will be returned if sufficient return postage is included when sending.

Mark outside the parcel "Competition," and send to **Rajar (1907) Ltd., Mobberley, Cheshire,** and post to arrive on or before the last day of the month.

Competitors abroad may send in prints made during the preceding two months.

The decision of **Rajar (1907) Ltd.,** must be accepted as final.

**FOR PRINTS ON ANY OF THE
RAJAR PAPER OR POSTCARDS.**

RAJAR (1907) LTD.,
MOBBERLEY, Cheshire.

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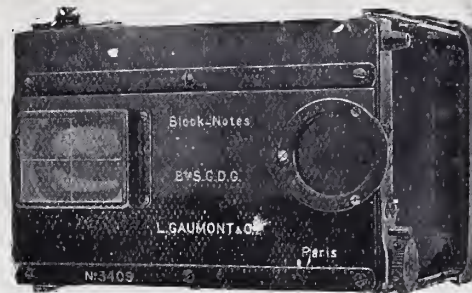
8A, RED LION SQUARE, HIGH HOLBORN, W.C.

Telegrams: "RAJAR, MOBBERLEY." Telephone: 10, KNUTSFORD.
Cables: A.B.C. CODE, 5th ED.

A MOST SUITABLE CHRISTMAS GIFT.

The BLOCKNOTES

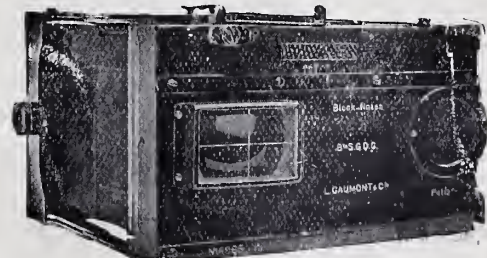
Still to the fore as the leading PRACTICAL POCKET CAMERAS



The No. 1 BLOCKNOTE for Pictures $4\frac{1}{2}$ by 6 c/m. ($1\frac{1}{2}$ by 2 $\frac{1}{2}$). Prices from £5 5s. to £10 10s.



The No. 1 STEREO BLOCKNOTE, for Pictures 45 by 107 m/m ($1\frac{1}{2}$ by 4 $\frac{1}{2}$). Prices from £7 10s. to £17.



The No. 2 BLOCKNOTE, for Pictures $3\frac{1}{2}$ by 2 $\frac{1}{2}$ ins. Prices £10 15s. and £14 15s.



The No. 2. STEREO-BLOCKNOTE, for Pictures 6 by 12 c/m (2 $\frac{1}{2}$ by 5 $\frac{1}{2}$), fitted with Zeiss-Tessar Lens (accurately paired) £19 10s.

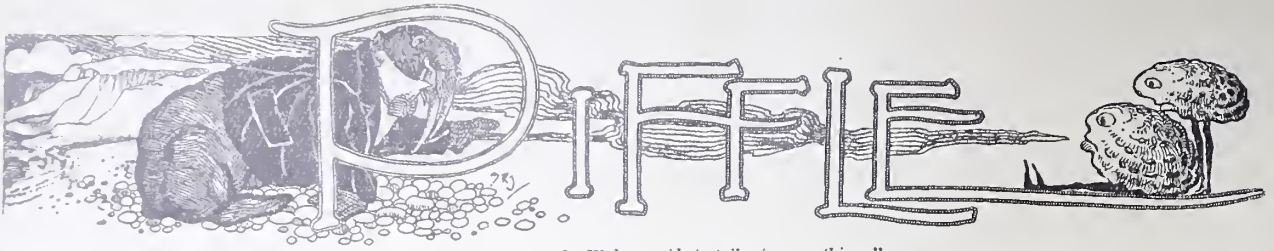
**AWARDED GRAND PRIX (Highest Award)
FRANCO-BRITISH EXHIBITION, 1903.**

Write for Illustrated Booklet and Catalogue, giving full particulars, post free from the sole manufacturers and patentees:

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"The time has come, the Walrus said, to talk of many things."

I FEAR it is an unreasonably long time since I offered anything in the way of real practical instruction on this page, and as readers are (perhaps) all thirsting for useful and reliable information, I think it will be well if I offer some sound remarks on the subject of the making of bromoils. The various oil-dabbing processes are certainly very much to the fore; the tap-tap of the brush is heard in the land, not unaccompanied by regrettable language; and all the photographic exhibitions bear ghastly witness to what may be accomplished in this direction.

* * *

Please don't imagine for a moment that I can make bromoils myself. If I would I couldn't, and if I could I wouldn't. But I have experimented somewhat in this line, and know more than I did. For instance, there are over a million different and distinct ways of going wrong, and I have found them all out and invented some new ones. There is probably no one in the wide world who has spoilt more good bromide prints, worn out a larger collection of brushes, and consumed more jars of variegated pigments than your humble servant. So no one can deny that anything I may say on this subject will be well worth hearing.

* * *

The sole aim and object of the bromoil process is the turning of a good bromide print into an oleagenous atrocity. This prime necessity of having a good bromide print to start with puts the process outside the reach of the vast majority of photographers. A good many think they can make a good bromide, but they can't. They are too easily satisfied with their results. But when, by some strange chance you do happen to get a good print you cannot do better than convert it into a bromoil. You had better take a good look at it before you commence operations; look at it long and carefully; it is your last chance, for you will never see anything worth looking at after the first step in the process of conversion.

* * *

This first step is the bleaching of the print. To prepare the bleaching solution you take some water and dissolve in it any chemical salts you happen to have by you. It doesn't matter much what you put in as long as you have a good variety, and provided that at least half of them are poisonous. You must, however, include some bichromate of potassium because this is tiresome to dissolve, and acts as an irritant poison if you have the slightest cut or scratch on your hands. To verify this, it is advisable to cut and scratch yourself here and there before you begin. When you have reached the end of your stock of chemicals, or if you find that nothing further will dissolve, you will almost certainly have a solution that will swipe your bromide image into oblivion at one swoop.

* * *

You now give the print, or what was formerly a print, an acid bath. It doesn't want it, but has got to have it. Get some strong sulphuric acid, and splash some on your hands and clothes so as to note the effect. You had better not splash any in your eyes, or you won't see your print when it is done. Put some of the acid in a bottle, stand it in the sink, and fill up with water. This breaks the bottle, and allows the acid to run down the sink, which is the best place for it. Having thus gained experience, put the water in another bottle first, and add the acid. This is the proper procedure, but is far less exciting and dangerous than the former method. You next fix the print. It won't hurt it. Nothing can do it harm now. At this stage you will find yourself the happy possessor of a piece of softened and flabby paper chock full of miscellaneous chemicals, and only needing pigmenting to turn it into a masterpiece.

Now get out your brushes and pigments. Of course, if you have not got these, you may as well throw up the task at once. It is merely silly to think of making pigment prints without pigment. You can buy the right sort of stuff in tubes, tins, pots, or casks, or you can make shift with tar or boot polish. It really doesn't matter much what you use, as the result will be utter failure anyhow. As to the brushes, some people buy them with fancy names at fancy prices, while others chop the end of their shaving brush flat with a razor and use that. A very effective and quick-acting tool is one of those long-handled brushes used in the ordinary course for tarring fences. One stroke with this will finish a quarter-plate print. When I say finish it, I mean finish it. You can't finish a 12 x 10 print with one stroke, but you can do quite as much damage as you can reasonably expect with such small expenditure of time and energy. Whatever brush you use it is always best to get a cheap, shoddy sort of thing, because you can then smother your poor print in next to no time with short hairs and dirt, and incidentally provide yourself with an excellent test of your patience and skill in picking these off again with a needle point or a pair of pincers.

* * *

Whatever brush and pigment you employ, you smear a generous coating of the latter on a slab of glass, and apply the oily mixture to the print with the former. To enable you to do this successfully, you should lay the print, either side up, on some wet blotting paper, and rub the surface dry with a piece of dirty, fluffy rag. Now dab away at it with the brush for an hour. At the end of that time go on dabbing for another hour. Then continue dabbing. If nothing happens, dab some more, and dab harder. When your brush is worn out take another, and dab again and yet again. Should you chance to be working on the proper side of the paper it may be that you will at last see some elusive indications of the original subject of your bromide print. Don't be alarmed. Keep calm. Continue dabbing, and it will disappear as you dab away the last faint traces of the gelatine. When you positively can't dab another dab, put the print (!) in a dish and pour on some petrol. Allow it to stand. The petrol evaporates. More useful knowledge. Pour on some more petrol, put the dish and its contents in the garden, and throw a lighted match at it—the dish, not the garden. Treat the firemen well, and show them the empty dish, explaining carefully the total disappearance of your print. Let them play the hose on the dish if it will gratify them.

* * *

This completes your operations for the day. You have not quite succeeded in making a bromoil print, but you have tried. 'Tis better to have tried and failed than never to have tried at all. And when you next see a bromoil print in an exhibition perhaps you won't be quite so free with your nasty remarks.

THE WALRUS.

SUBSCRIPTIONS.

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PHOTOGRAPHY. DECEMBER 29TH, 1908. ■

PHOTOGRAPHY

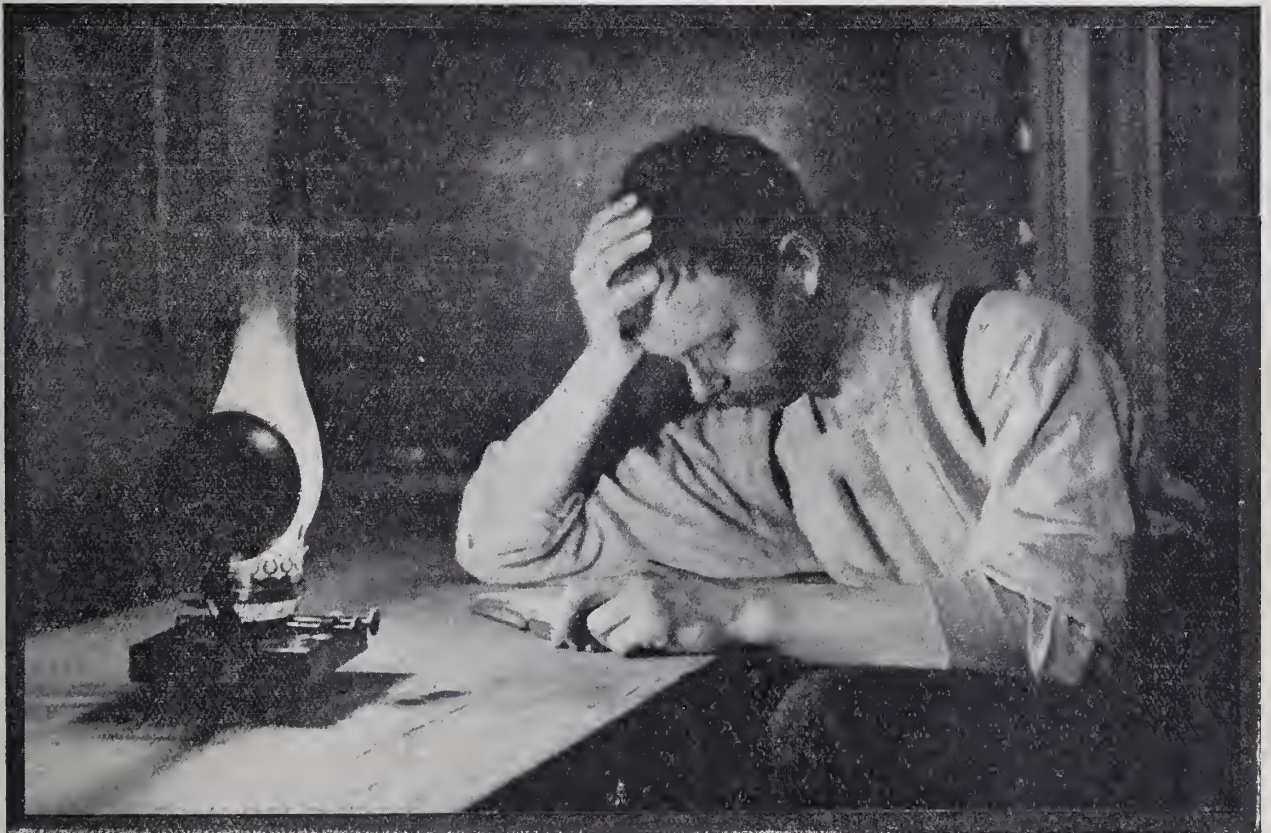
A JOURNAL FOR EVERY CAMERA USER.

EDITED BY R. CHILD BAYLEY.

PUBLISHED WEEKLY.

DECEMBER 29TH, 1908. TUESDAY. No. 1,051. Vol. XXVI.

A Real Lamplight Picture.



IMPROVING HIS MIND (SEE PAGE 693). THIRTY SECONDS EXPOSURE AT F/6.

By S. J. TAYLER.

SPECIAL SUBJECT OF THIS ISSUE:

Negative Making on Winter Evenings.



EDITORIAL

1908.

It is customary at the close of the year to indulge in a retrospective glance over its photographic history, but in this respect 1908 need not delay us very long. It has been a year of steady development rather than of sensational advance. There has been nothing like the advent of the Autochrome plate, which made 1907 so memorable. In colour photography the Autochrome still stands alone. The "Thames" plate has been described in glowing language, but, theoretically admirable as it may be, it can hardly be regarded in its present form as a serious rival of Messrs. Lumière's product, whatever it might develop into. The Autochrome itself has been improved in speed and in general cleanliness and freedom from defects. The oil process and the allied "bromoil" have had the lion's share of the attention of exhibiting photographers, thrusting even gum bichromate itself for the time being into the background. It is too soon to write definitely about the silver phosphate process Ensina, as the paper is called, but as things stand at present it looks as if in time to come it might be regarded as the feature of 1908. Certainly it is hard to forecast the position which this wonderfully simple and fool-proof paper may attain.

In the history of *Photography and Focus* 1908 stands out as the year in which the two popular photographic weeklies, *Photography* and *Focus*, coalesced to form a combination whose strength puts it in a position that is unique in its class of technical journalism. The readers of both these magazines have given the combined paper their support to an extent which is most gratifying. We hope that we shall continue to have it, and can at least promise that we will leave no stone unturned to hold, and even to increase, their goodwill.

Our Programme for 1909.

And this leads us naturally to the subject of our programme for the New Year. We may say at once that we have no extensive changes to announce. We are not disposed to make a great shout about wonderful improvements with the New Year. To be frank, had we seen our way to effect radical changes for the better in the paper we should not wait for the coming of 1909 to put them in hand. There is no magic in the starting of a fresh twelve months, and spasmodic efforts at improvement rarely result in any permanent

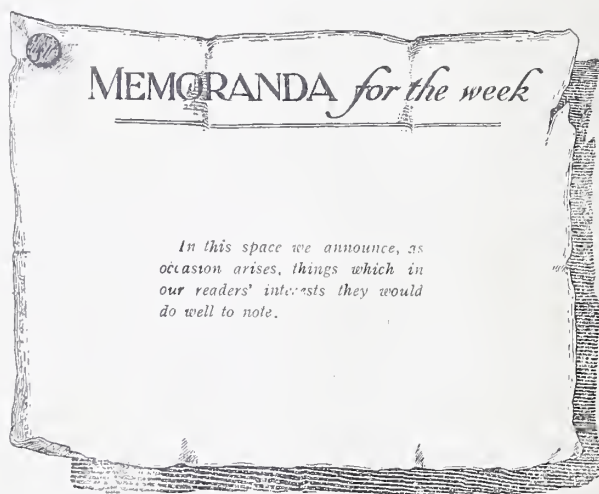
benefit. That the lines upon which *Photography and Focus* is now being conducted are those which have the cordial approval of its readers we have every reason to feel sure, and it is on those lines that it will be conducted in the future. "Easily followed" was the happy description which a contemporary applied to this paper recently; we hope to make and keep the following process so easy that the circle of our readers may continue to be an ever widening one. We shall introduce a few new features with 1909, but those who appreciate *Photography and Focus* in its present form need not fear that any of those which at present characterise it will be in any way weakened. Saying which, we will leave the subject, adding only that we wish each and every reader a

HAPPY AND PROSPEROUS NEW YEAR.

The Suggestion of Motion.

The fully illustrated letter which we publish on another page this week deals with a curious question—one that has not received very much attention from photographers, but one which in its broader aspects concerns a great many of us. We think that there can be no gainsaying the fact that the writer makes his point good. To convey as fully as possible the impression that a train is moving in a certain direction it is necessary that certain parts of the mechanism should be shown in a certain position. To our eyes he is right; yet it is very difficult to see why this should be so. It seems to some extent to reverse what is regarded as the accepted order of things.

Take, for example, the case of a boat. To convey a good impression of the progress of the boat it is necessary to show a greater space of water ahead of it than astern. Trim the print so that this is no longer the case, and at once the sense of movement of the boat is diminished. The same holds good pictorially of other things which one associates with movement—vehicles, persons walking, etc. It is one of the things which the pictorial worker learns at a very early stage. Yet in the case of the locomotive this rule does not seem to apply. The rods are moving backwards and upwards, and the visible available space for them to move into is much less than the visible space they appear to have moved out of. A reference to the illustrations on page 691 will make our meaning plainer.



There is another thing about these coupling rods, and that is that they unquestionably play a large part in the suggestion of motion. Other things being equal, the engine on which they are clearly visible in the correct position gives a better idea of movement than one which is without coupling rods entirely. Their effectiveness and the fact that they should be shown in a certain position is recognised by the drivers themselves, for, as Mr. Chrystal tells us, if they are left to put their engines in what they think to be the best position for photography, they invariably put them with the rods so that as the engine moves forward the rods will ascend.

A New Camera Club.

Since the disappearance of the old Camera Club, which had its headquarters in the Charing Cross Road, there have been repeated attempts to provide London with some institution of a similar character, but hitherto they have all proved abortive. We now hear that there is promise of success. Mr. Reginald Craigie, who has been interesting himself in its formation, tells us that if sufficient support is forthcoming suitable premises in the West End can be secured. These will comprise a smoking room, studio, enlarging room, arc light printing room, wookroom, and several dark rooms, the use of which will be free to members except in the case of the studio, for which there may be a small charge made. No liability will attach to membership beyond the annual subscription, which will be three guineas, two guineas, and one guinea for town, country, and foreign members respectively. There will be no entrance fee for original members, and an influential committee is being formed. Those who are prepared to support such a scheme and to become members should communicate at once with Mr. Reginald Craigie at the Blenheim Club, King Street, St. James, S.W.

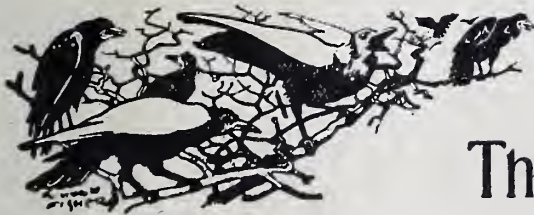
AN AWFUL WARNING.

When Herbert FitzDash had been hoarding his cash
More years than he'd care to confess,
He purchased an X—, a most ripping reflex,
Which for long he had pined to possess.
And he went the next day to a busy highway,
Where motor cars frequently passed,
Resolved to let fly at the first that came by
At a speed that was decently fast.

You *should* have seen 'Erb as he stood on the kerb,
With his brow wrinkled up in a crease,
With eyes closely glued to the top of the hood,
And his thumb on the shutter release.
Whilst away down the road rose a dust cloud that
showed
A motor car coming apace,
Till Herbert stepped out—heard a sudden great shout—
And went whirling headlong through space.

He was boosted so far by the front of the car
That had cannoned him thus from behind,
That most of FitzDash was reduced to a smash,
But they gathered up all they could find.
With his hair full of dust, and his camera bust,
And a double concussion as well,
Whilst a deeply marked dint ploughed up in the flint
Showed plainly enough where he fell.

Poor Herbert FitzDash is still hoarding his cash,
But not for another reflex;
There's the doctor, you know, and the Camera Co.
To pay for repairing the wrecks.
And he solemnly swears that reflexes are snares
To a man so excessively keen,
That, deaf as a post, he gets wholly engrossed
With the picture he sees on the screen.



The Week's Meetings.

TUESDAY, DECEMBER 29TH.

G.W.R. Lit. S. "Velox Paper." W. F. Slater.
Blackpool & Fylde P.S. "Cloud Photography and Printing." A. W. Cooper.
Nelson C.C. "How Plants Rear their Young." J. Hartley.
Hackney P.S. "Colour Projection." S. W. Morrison.
Blackburn & D.C.C. Members' Enlarging Night.
Nelson P.S. Musical Evening.
Hyde P.S.A. P.S. Photography and Focus Prize Slides.

WEDNESDAY, DECEMBER 30TH.

Croydon C.C. "Velox Paper." W. F. Slater.
Sale P.S. Social Evening.
Leeds C.C. "Development of the Negative." F. Rust.
North Middlesex P.S. Technical Meeting.
Croydon C.C. Conversational Evening.
Dukinfield P.S. Annual Supper.

THURSDAY, DECEMBER 31ST.

Watford C.C. "Velox Paper." W. F. Slater.
Rochdale A.P.S. Prize Slides.
North-West London P.S. 1908 Affiliation Slides.
Melbourne C.C. "Copying by Artificial Light." P. Fred. Visick.
Richmond C.C. Lecture. Major Latham.
L. & P.P.A. "Norway and the Arctic Circle." W. Kilbey.

FRIDAY, JANUARY 1ST, 1909.

Oliver Goldsmith P.S. Members' Night.
Colne C.C. Members' Slides.

MONDAY, JANUARY 4TH.

Walsall P.S. "Pictures of Switzerland." E. M. Elliott.
Ulster P.S. "A Week in Brittany." J. Sumner.
Glasgow and W. of S. A.P.A. "Sinop Process." Victor L. Alexander.
Preston C.C. Photography and Focus Prize Slides.
South London P.S. Monthly Competition.
Leek P.S. Lantern Night.
Walthamstow P.S. "A Steam-er through Hol and." Zealand Steamship Co.
Dewsbury P.S. "Velox Papers." W. F. Slater.
Catford and F.H. P.S. "The Improvement of the Negative." H. C. Hancock.
Southampton C.C. Annual Meeting.
Birkenhead P.A. Annual Competition.
Wallasey A.P.S. "Society Rambles." R. Tunnecliffe.
Scarborough & D.P.S. "Slide Making." J. Pickering.
Stafford P.S. "Slide Making." H. A. E. Hey.
Kidderminster & D.P.S. "Mountain Scenery in British Isles." H. Tomkinson.
Canterbury C.C. Annual Meeting.
Bowes Park and D.P.P. "Home Portraiture." M. Fraser Black.

Societies will have their meetings announced here if the syllabus is sent to us at the beginning of the Session or from time to time.

Special
to
"Photography
and Focus."

Taking Out One Figure from a Group.

BY EUAN HYRST.

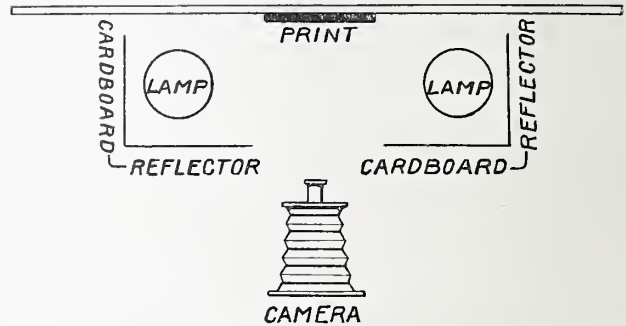
This is a branch of photography that can very easily be followed by artificial light on a winter evening. Full details of exposures and manipulations by which the very striking result that is illustrated below was obtained, are given in the article.

THE task described in the title of this article is one which the amateur photographer is often asked to do, and one about which, in the absence of any very explicit instructions, he is naturally inclined to hesitate. Many people who are never photographed separately form one of a group, and many more find their best likeness in the less studied pose in a group rather than in the laboured product which is so often the result of posing singly in a studio. When they die, or there is no opportunity of getting another print, the group is turned to, and a wish is very reasonably expressed that the single figure could be isolated and enlarged.

It is not difficult to effect this, although how far it may be added to and completed in the way shown in the illustrations must depend upon the photographer's skill in working up. This particular case was a very bad one, as even part of the lady's face was obscured by another. It generally happens that this is not so, and that a very little hand work will be required to make the final result presentable.

If the original is an old print, the first thing to be done is to clean its surface carefully with a little tuft of cotton wool moistened with methylated spirit. A copy negative is

For most prints an ordinary plate will be found most suitable. If the print has yellowed at all on no account should an orthochromatic plate be employed. If it is a good purple-toned P.O.P. or a black tone print the best result will be got upon ordinary slow plates, but if it is at all red a fast plate should be used.



The most effective way of lighting the print is by means of two oil lamps of equal power arranged as in the illustration.



Part of the original group.



Enlargement with the other figures blocked out.



Finished print.

then made of the part containing the figure on as large a scale as is practicable. The limitation will generally be the camera extension, so the simplest plan is to rack out the camera as far as ever it will go and focus the print by moving the camera to and from it. This method shows us at once the picture on the largest scale possible with that lens and that camera extension.

The whole may be placed on a table, pieces of white cardboard, bent at right angles, being used for the two-fold purpose of reflectors and screens to prevent the direct light from the lamp reaching the lens. If only one lamp is available, it may be placed for half the exposure in the position occupied by one of the lamps in the diagram, and for the other half in the position of the other.

It is not easy to give any very definite data as to exposure, since circumstances alter it so greatly. A rough guide may perhaps be furnished from the example reproduced herewith. The original was a purple toned P.O.P. print, and in making the copy negative it was enlarged two diameters and lit by two duplex oil lamps. The correct exposure in this case on an Imperial ordinary plate, with the stop marked $f/11$ in the lens, was found to be ten seconds.

If the original negative of the group is in existence, there is no need to make a copy negative, as the blocking-out, which forms the next stage of the proceedings, may be done upon that. Before any blocking-out is attempted, a print on glossy P.O.P. should be made, to be used as a guide in the work on the negative. With this before us, and the negative supported in a suitable retouching desk or similar arrangement, we proceed to cover with opaque the parts not required. If the original negative is worked on, it is best to use the regular "Opaque," or other blocking-out preparation, as this can be washed off afterwards, leaving the negative unaffected; otherwise, any water colour, Indian ink, or even Brunswick black can be employed. The best plan is to follow very carefully all the outline, making just a narrow black line all round the head, shoulders, and other parts of the figure to be isolated. When this is done, it is a very simple matter to fill in all up to the line with opaque pigment.

The next stage is to put the negative so obtained in an enlarging lantern, and to make an enlargement of convenient size, say whole-plate, on a smooth or platino-matt surface bromide paper, vignetting or shading off the lower part of the bust. The exposure must be sufficient to bring out the full, detail in the face, and the result should be soft, and not choked up in the shadows.

The enlargement obtained in this way must be mounted on plain card, and, in order to avoid lumps or uneven surface, it should be mounted by taking it straight from the washing water, blotting off the water from the back, rubbing in a plain starch paste or Higgins, and then mounting it and squeegeeing lightly with a clean cloth between the print and the squeegee. There is no need to trim the enlargement. Any lumps or unevenness of the surface will make it difficult to work in the background.

When the enlargement is quite dry it is ready for working up. Many amateurs shrink from this part of the process, and if the case is a difficult one, their best way out of it is to send the picture and the guide print to some good artist in black and white, or to some reliable firm of enlargers, to have the necessary work put on it. But in a great many cases there is no real need to do this, and all that is necessary can be done by an amateur photographer of very moderate skill with the brush. It should be borne in mind that this enlargement is not the final result, but is only an intermediate step, and that the rephotographing on a smaller scale will serve to tone down any crudeness, which it will do to an extent that is quite astonishing.

The first thing to be done is to insert the background. A good way of doing this is to get a little powdered charcoal or stumping chalk, and to rub it on a piece of cardboard with a wad of fine cotton wool. When the wool is evenly covered with the charcoal it is lightly rubbed over the background until an even tint is obtained, and, with indiarubber or soft bread, any of the charcoal which has encroached upon the face may be rubbed off. Clouds can be indicated by the judicious use of rubber, and the vignette may be made just as soft as is required.

The clothes must then be worked over, using washes of water colour. Where necessary Chinese white may be employed, as the result is to be photographed, not looked at. The face must be carefully spotted with a fine brush and water colour, filling up the holes and patches with a series of small dots. One golden rule in all work of this class is to avoid tampering with the eyes. No attempt should ever be made to draw them in, but reliance placed entirely upon photography and upon the faithfulness of the copy to the original.

When all the needful work has been done upon the enlargement, it only remains to rephotograph it, making the new negative of the size required for the prints; usually, this is half-plate. A good, clear negative should be obtained of density suitable for the printing process selected. It will in that way be possible to obtain any number of copies, all alike, and all without any trace upon their surface of anything like handwork or touching up.

The Modification of Sulphur-toned Bromide Prints.

BY W. J. ROUTLEY. *Special to "Photography and Focus."*

IT may not be generally known that weak or yellowish sulphide-toned bromide prints can be altered in colour, the sepia being intensified, or the original black or grey brought back, and that very simply. For the whole of the processes four solutions are required, which are all more or less what the photographer will already have by him. They are:

Mercury Bleacher.

Mercuric chloride	1 ounce
Ammonium chloride	1 ounce
Water (hot)	20 ounces

Redeveloper.

Any usual bromide paper developer diluted with from four to ten times its bulk of water.

Sulphide Bleacher.

Potassium ferricyanide	120 grains
Potassium bromide	1 ounce
Water	20 ounces

Sulphide Toner.

Pure sodium sulphide	2 drams
Water	20 ounces

The dry sulphide-toned print is placed in a dish and evenly flooded with the mercury bleacher, which, it may be pointed out, is the usual bleaching bath in the ordinary form of mercurial intensification. The action of the bath is very

rapid, out the bleaching which it will effect on a print that has already been sulphide-toned is only a partial one.

As soon as the print has been evenly affected by this bleaching bath, which will take from thirty seconds to one minute, it is given a thorough washing for at least ten minutes in running water. The washing must be thorough, the aim being to remove all traces of the mercury solution as thoroughly and as quickly as possible.

If the print when finished is to be of a black tone, we may now dilute any ordinary bromide paper developer with ten times its bulk of water, and redevelop the bleached and washed print in this until just a trace of warmth still shows, when the print may be washed and dried as usual. When dry all trace of warmth will have gone, and a fine black print will be the result, equalling the original with, if anything, perhaps a slight increase in detail and loss of contrast.

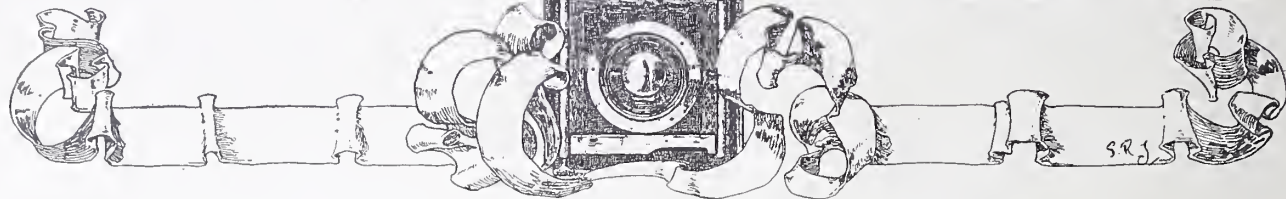
If the print is to be toned with sulphide a second time, the developer should only be diluted with four times its bulk of water, and the print should be redeveloped as far as it will go, when a good degree of intensification will be seen to be the result. The print is well washed, and is then placed in the sulphide bleacher, given above, washed quickly to remove any yellowness, and then put into the sulphide toner to darken. This is just the usual sulphide toning process. The print is then merely washed and dried.

This last method will give a much darker sepia than the original, but not such a good colour as the best sulphide toned bromides, although it may be a great advance upon the weak print with which one started. If the result of the second sulphide toning is not liked, the print can be bleached in the mercury once more and redeveloped to a black colour, and no doubt may be sulphided a third time, though I have not carried the process beyond a second blackening.

As far as permanence is concerned, I have had a bromide print that has been twice sulphide-toned, partly covered and exposed to light and air for the last three months, and others once blackened and twice blackened, exposed in the same

way for nearly three weeks in an ordinary room without any signs of fading showing themselves so far. The experiments were made to try and save some enlargements that were of a poor colour, and were quite successful. In the case of small contact prints, it is hardly worth the trouble, but for enlargements of a good size, which come expensive if they are spoilt and have to be made a second time, the process can be recommended. It is a good plan to make a preliminary trial on small prints on the same paper (as all makes of bromide paper do not act in the same way), blackening to different degrees to ascertain which gives the best result in the second sulphide toning.

PRACTICAL PARAGRAPHS



COPYING DIAGRAMS AND TRACINGS.

It is possible to make photographic prints of diagrams by tracing them first with a sharp point on a glass coated with some yellow film, through which the original can be clearly seen, but which is sufficiently non-actinic to allow the glass to be used subsequently as a negative, the scratched lines printing black, while the film generally keeps the paper white. Such a film, says Sir H. Trueman Wood, may be made by taking six drams of alcohol, thirty grains of shellac, two grains of aurine, thirty drops of Judson's mauve dye, thirty drops of water, half an ounce of negative collodion, and three-fourths of a fluid ounce of ether. The mixture is poured on to the plate like collodion, and dries in a few minutes. We have succeeded very well by taking an ordinary unexposed dry plate, fixing, washing, and drying it. The glass, which then has a fine coating of clear gelatine on it, is allowed to soak for ten minutes in a strong solution of eosine in water. It is then rinsed for half a minute under the tap and dried. A needle in a penholder makes a good tool for tracing on the film, and a ruler can be used for straight lines. Prints may be made either by gaslight on bromide paper, or by daylight on P.O.P.

* * *

OVER-PRINTED P.O.P.

According to Professor Namias, prints on P.O.P. which are a little over-printed can be remedied by being immersed without washing in a solution of half an ounce of common salt in five ounces of water, to which a dram and a half of hydrochloric acid has been added. They are left in this for from five to ten minutes, and are then rinsed and toned in a combined toning and fixing bath. If they are much over-printed, from one to four grains of copper sulphate may be added to the above solution; the more sulphate the greater the reduction. The action is a very rapid one. If the prints are to be separately toned and fixed, the following solution, which is at once a reducer and a toner, may be employed:

Gold chloride	...	...	...	...	2 grains
Common salt	...	...	...	...	40 "
Hydrochloric acid	...	...	...	...	20 minims
Water	...	...	...	...	10 ounces

If the tone obtained in this bath is not satisfactory, the print, when sufficiently reduced, may be rinsed and transferred to an ordinary toning bath.

* * *

A reader of "Camera Craft" writes: "Placing a negative aside to dry recently, I was chagrined and surprised to find, on looking at it a few minutes later, that it was well sprinkled with finger marks. Trying an experiment with the handiest chemical that suggested itself, I found that a few drops of hydrochloric acid in a couple of ounces of water gave a solution that, applied with a piece of cotton wool, removed them perfectly."

TITLES ON LANTERN SLIDES.

The neatest way of titling lantern slides is to write in white ink on the black mask before binding up the slide. White ink which will run freely from the pen is now on sale at most dealers in artists' materials, but when it cannot be bought it is easily made. A little of the moist water-colour Chinese white, supplied in collapsable tubes, is thinned down with a solution of gum arabic until it is of the right consistence, and should be used in a fine mapping pen. If the pen is charged, not by dipping it into the ink, but by using a brush, it will be much less liable to blot.

* * *

WRITTEN SLIDES FOR THE LANTERN.

"It may not be generally known," writes Mr. Stoneway, of Liverpool, "that the dammar varnish which is now so generally used for Autochromes, and can be readily purchased, makes an excellent medium for written or drawn lantern slides. Two ounces of the varnish should be diluted with half an ounce of benzol in which a little of the indiarubber solution used for cycle tyres has been dissolved. The quantity is not very important; a piece about the size of a caper is sufficient. Glass is cleaned, coated with the varnish in the ordinary way, and is allowed to dry. Anything that has to be written or drawn on it can then be executed with a mapping pen and artists' liquid indian ink. It is surprising what fine work can be done on such a coating."

* * *

SILVER STAINS ON NEGATIVES.

"These may be prevented," writes Mr. A. R. Siddals, "by making the surface of the negative repellent of moisture. To do this, a little brown Nugget boot polish is applied to it with a bit of flannel, and the negative is then polished with Selvyt. The film will take a high polish and become impervious to moisture."

* * *

DISHES FOR ENLARGING.

The most serious outlay which the photographer has to incur when taking up enlarging will be for dishes. Porcelain dishes may easily exceed the enlarger itself in cost, and are, moreover, extremely fragile. All my own enlarging is now done with ordinary "tin" trays, which were made for me by a village tinsmith. Each is an inch larger each way than the paper to be treated in it, and the edges are made of an inch and a half of the tin turned up. A ring is soldered on by which the dishes when not in use are hung up. After the tins were delivered to me, I gave each a scrubbing inside and out with sapollo, well rinsed, and dried them, and then gave three coats of Brunswick Black, drying in between each. We are told that metal dishes are not suitable for hypo solutions, but I have had no trouble on this account. After using, the dishes are at once washed out and hung up.—H. THOMAS.

Correspondence

For the free discussion of all matters of general interest to Photographers

The Editor is not responsible for the opinions of his correspondents.

REPRESENTING A TRAIN IN MOTION.

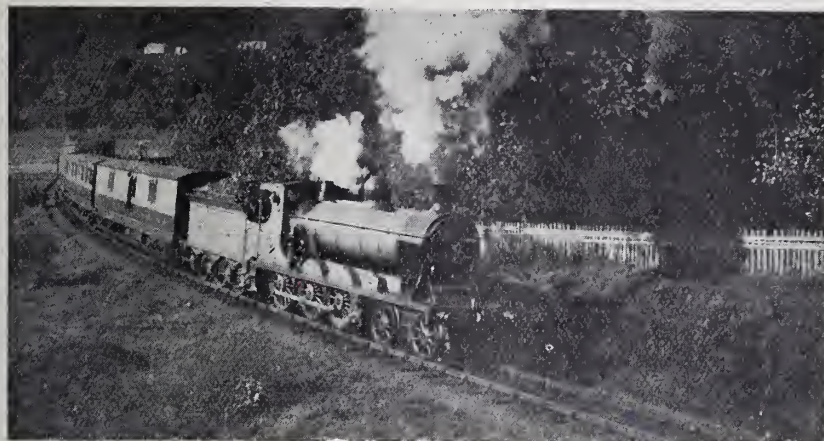
Sir,—In *Photography and Focus* for December 8th it is stated editorially that in train photography the actual instant of exposure is not important. As an amateur photo-

wheels and to the left of them. This to my mind gives a strong suggestion of movement to the right, and were the photograph of the whole engine to be seen, one would at once say that it was moving in that direction. Therefore in train photographs this is the best position in which to show the coupling rods—below and a little behind the wheel centres. The distance behind should not, if possible, vary more than the eighth of a circle, from dead below to about the position in the illustration. An intermediate position is to be preferred.

Now how is this result to be obtained? Take an easy example. An engine with driving wheels 6ft. 6in. in diameter is drawing a train at fifteen miles an hour. The driving wheels are exactly half covered by the splashers. At this speed the wheels revolve slightly over once per second. But the rods are only in view for half of this time, and they are only in what I call the ideal position for an eighth of a second. During a second the train will have moved twenty-two feet; and another thing that has to be watched is to get the train in the most suitable position in the stretch of line that has been focussed on the screen. That is to say that we must take care that the

image of the engine does not run out of the plate while we are engaged in watching the coupling rods.

The only photographs I have here at present nearly all show the rods; five out of thirty-three do not: in fifteen



THE IDEAL POSITION. Although there appears to be an unnecessary amount of line in front of the engine, another revolution would have thrown the engine almost out of the plate, and the picture would have lost the effect of the heavy shadow cast by the engine. This was an easy picture to take, as speed was about fifteen miles per hour up hill. Cal. Ry. Callander and Oban train on 1 in 50 gradient.

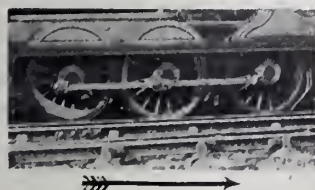
grapher interested in railways, I have gone in largely for train photography—not from the pictorial point of view so much as from that which looks upon a train photograph with due appreciation of its mechanical points.

To make a train photograph, therefore, I endeavour first of all to select an angle of view which will let me see the mechanical features of the engine—the type, construction, etc., getting all the detail possible in the photograph. On this point I may say that I would rather have a train photograph which would show the number of the engine than one which was purely pictorial, without any suggestion of detail. This is almost entirely a question of lighting and exposure.

Secondly, I try as much as possible to give the suggestion of motion to the photograph. This is, of course, helped by a good show of steam, but “the actual instant of exposure” has a very great deal to do with getting the required result. Most engines of the present day are provided with two or perhaps three coupled driving wheels on each side. They are coupled together by a rod which, as the wheels revolve, disappears behind and reappears from behind the splashers, which cover the driving wheels to the extent of one-third to one-half their height.

Now if during the instant of exposure the coupling rod is obscured from view (see the figure below), we get a singularly bald and uninteresting picture. The instant of exposure must therefore be arranged so that they are seen in the picture.

But this is not all. A glance at the accompanying illustration shows that it represents the coupling rod below the centres of the



This is not a very good position, but would have been better taken on the previous revolution as the front of the engine would not have been on the dark background, and the whole would have been better lit. Cal. Ry. Callander and Oban train ascending a gradient of 1 in 50.

the rods are in, or very nearly in, the ideal position. The fact that most of these were taken in an ordinary Kodak and that the finder had to be watched is, I think, sufficient excuse for not being able to practise what I preach more successfully. I have taken a great many others, however, with a stand camera, and find that, even in the case of trains travelling at high speeds, with practice the desired result can be obtained.

Let some of the high-speed workers have a try at this problem, starting with a train at about fifteen miles an hour, and let them try to catch the particular eighth of a particular revolution, which is going to go far to the making of a



Cal. Ry. Train leaving Bridge of Allan.

This print shows the extremely bald appearance given to the engine by the concealment of the rods.

picture. They will find that, whereas a man bowling or hitting a tennis ball only makes one "revolution" of his arm, and the photographer has only one ideal position to catch (admitted in a very small fraction of a second), the train photographer has to select the ideal position of his subject from a number of quickly recurring revolutions, and to get that particular one which will make his picture most effective. The difficulty of this, naturally, will increase with the speed of the train.

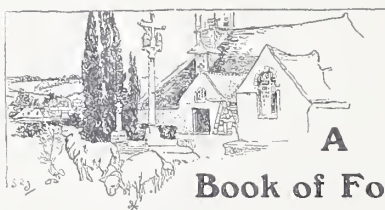
Therefore, I think that the actual instant of exposure is the most important consideration in successful train photography.

The prints herewith are not chosen for their excellence as photographs, but to show the point that I am driving at. It will be noticed, however, that I have tried to give a detailed picture of an engine without entirely sacrificing the picturesque. They are mostly taken from places where I knew there would be a good display of smoke.

Yours, etc.,

R. A. CHRYSTAL.

[Our correspondent sent with his letter quite a number of prints, from which we have selected one or two which serve to make his point clear.—ED.]



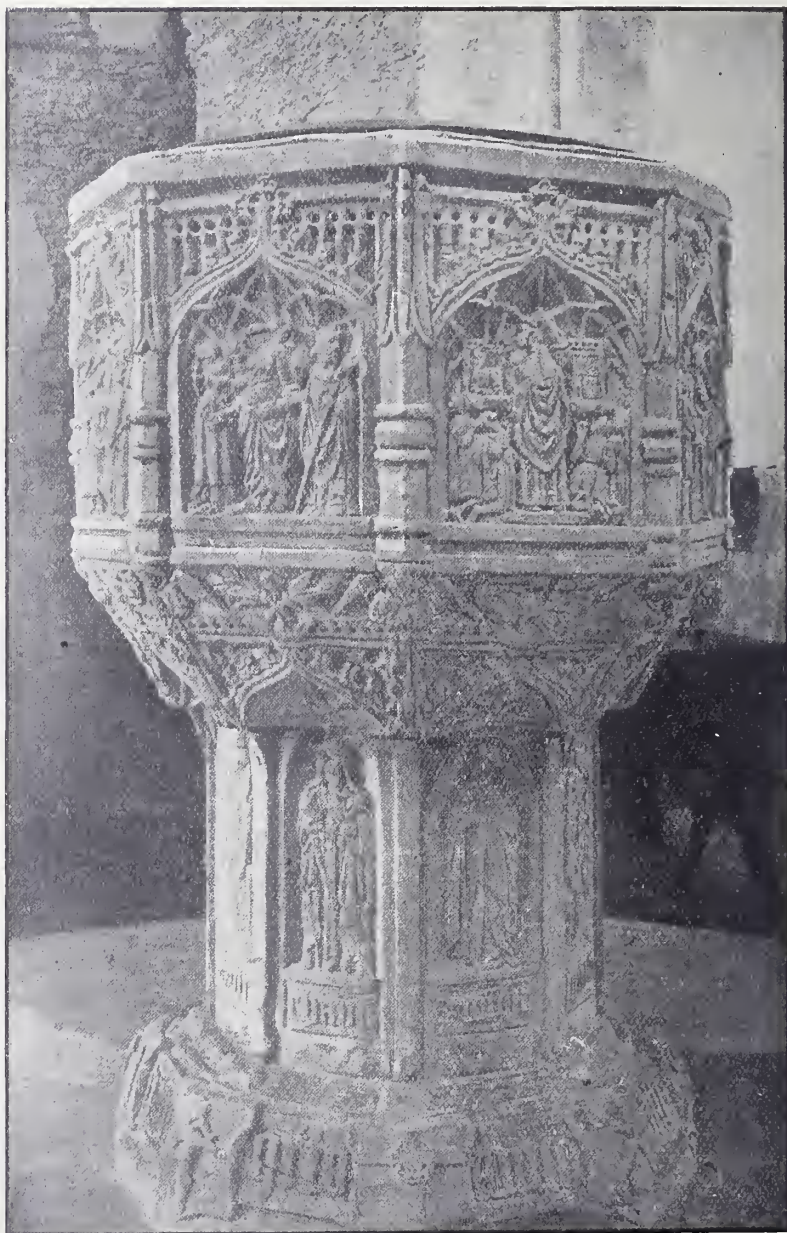
Book of Fonts.

PHOTOGRAPHY is applied to many purposes as a recorder, but seems to be at its very best when the subject is some architectural detail or other. This application of the camera is well shown in the two fine works which the Oxford University Press has issued recently from the pen of Mr. Francis Bond. That authority's work on "Church Screens and Galleries" was reviewed by us a few months ago, and the volume entitled "Fonts and Font Covers" has now come to bear it company.

The camera has never been more fully employed than it is in this instance. "Fonts and Font Covers" contains over four hundred photographs; and these, although derived from many different sources, have all very obviously been taken to show clearly and adequately the detail of the object photographed. By the courtesy of Mr. Henry Frowde, the publisher, we reproduce herewith one of these pictures—the font at Walsoken—in this case from a photograph by Mr. Bond himself; it will give some idea of the way in which this work is illustrated.

We may be forgiven for putting so much stress upon the illustrations rather than upon the letterpress, but in a work of this character this is inevitable, apart entirely from the special interest of *Photography and Focus* in the camera. There is a great deal of exceptional interest, however, apart from the pictures. The history of the rite of baptism is sketched, showing how the gradual changes in the ritual have led to corresponding alterations in the design of the fonts, not omitting the radical move made by the Puritans towards simplicity. The various fonts are classified, and the history of their design is sketched; while a chapter is given to the special subject of font covers, amongst which will be found some of the most beautiful of the illustrations.

"Fonts and Font Covers," by Francis Bond, contains 364 octavo pages and 426 illustrations, and sells, strongly bound in cloth, at 12s. nett.



REAL LAMPLIGHT PICTURES.

Written and Illustrated by Sidney J. Tayler.

Special to "Photography and Focus."



HERE have been written instructions galore for the production of imitation lamplight effects in photography, the illuminant employed being usually magnesium ribbon or powder, artfully disguised. That very convincing results have been produced by this means it is unnecessary to admit; but it seems to me that the preparations necessary are very troublesome, and there is always a lingering suspicion in the mind of the critic that some kind of "fake" has been used.

The production of genuine lamplight pictures, however, is not at all difficult in these days of rapid lenses and rapid orthochromatic plates. If the picture includes—as I suppose it always must—a living model, one must be chosen who can sit still for a fair length of time, and the

position selected must be a comfortable one, in which risk of movement is minimised. A slight amount of movement, such as that caused by the unavoidable act of breathing, is usually not objectionable; and even this need not be such as to have any effect on the plate, as is proved by a negative in my collection of gaslight exposures, for which the model sat for one minute, without showing the slightest trace of blurring in his waistcoat buttons or watch chain! There are people who cannot, for the life of them, keep still for even two or three seconds, and it would be hopeless to expect anything from them; and I do not suppose children would be found who could do it. Babies must certainly come in the class of impossibles, unless one can catch them sleeping; and this, I fancy, is a difficult thing to do when required.

The subjects available are naturally somewhat limited, and I think that the artist must be contented with ringing the changes on pictures of reading and writing, resting, "reverie-ing," and so forth, but

A REAL LAMPLIGHT PICTURE.



*Bachelorhood.**Thirty seconds at f/6.**By S. J. Tayler.*

readers may possibly have more inventive powers in this direction than I. Much might be done by the use of a head rest, provided the model can retain a fairly alert and interested expression and attitude, and not give away the fact of his being artificially supported.

The light itself must be shaded in some way, both to concentrate the illumination and to avoid risk of flare troubles, halation, and reversal of the image. I have tried exposures on a subject which included an unshaded flame, and it seems impossible to avoid the second and third of these faults, although the presence or absence of flare depends mainly on the construction of the lens and length of exposure. I obtained a beautifully circular patch of flare on a plate with two minutes exposure, the lens being one with eight open surfaces, but at one minute this trouble did not arise, though halation and reversal did. A cemented lens might be free from flare, and a single achromatic would almost cer-

tainly, but the conditions are, of course, very trying; and the result does not necessarily indicate the good or bad quality of the lens.

It is almost impossible to avoid over-exposure of the lamp itself, and local reduction will probably be necessary to persuade it to print out fairly. How to avoid this I do not know, but I suggest that a shield of some sort might be fixed up during three-fourths of the exposure, and removed for the rest of the time. Reduction with Baskett's reducer is not difficult, but prevention is better than cure. Over-development is especially to be avoided, and the negative should preferably be thin, recourse being had to intensification if necessary to bring it up to printable density; by this means the high lights are not over-developed at the expense of the shadows.

The photographer must not be misled by the appearance of the reflected lights in the picture as viewed on the screen; they do not exert nearly so powerful an effect on the plate as one is inclined to expect.

White reflectors, placed on the shadow side, are almost useless, and as a substitute I recommend some sort of weak accessory

*The Invalid.**Two minutes at f/8.**By S. J. Tayler.*

lighting, such as a second lamp placed at a fair distance away, or magnesium ribbon sparingly used. I have not yet arrived at the best proportion of accessory lighting, but it seems to work out somewhere about two inches of magnesium ribbon to one minute of exposure, the ribbon being burnt close to the camera. The making of definite experiments is not my forte, and all the illustrations shown were produced by rule of thumb.

Below I give full details as to the exposure for each one, and the reader will thus have something to go upon if he is disposed to try his hand at the work. There are no means of ascertaining the exposures but by trial and error; after one or two attempts the appearance of the picture on the screen will be a fair guide, but the production of pictures by artificial light is full of surprises. The nature of the subject, the distance of the model from the lamp, and the condition of the lamp itself all have to be taken into consideration.

As regards development, I usually recommend pyrometol, omitting the bromide; but I think that a developer such as rodinal or azol is, on the whole, superior. The resulting negative is softer, and no allowance need be made for the colour of the image. It is, however, largely a matter of discretion in the compounding and use of the developer employed, and perhaps the experimenter would be better advised to stick to the one with which he is familiar. always, of course, avoiding any ready-made developers with the actual nature of the ingredients of which he is not familiar, as these may contain a large proportion of bromide. A weak solution is preferable to a strong one when the contrasts in the subject have been very great, and the absence of bromide in the developer is a safeguard against excessive harshness in the result.

Now to the illustrations. "Bachelorhood" (see page 694) is a subject which I have tried several times, but have reluctantly come to the conclusion that, without a long exposure, it is almost impossible. This one, which is the best so far, had 30 seconds at $f/6$; and an incandescent gas burner above and slightly in front of the camera was the accessory lighting. A generous use of magnesium might bring up some detail in the black clothing, but I was afraid of introducing cross-lighting. The plate was an Imperial S.S. Ortho., and the developer pyro-metol.

"Improving His Mind" is the most remarkable result I have obtained. I do not know whether the plate happened to be one of an unusually fast batch, which may be the case. The exposure was 30 seconds at $f/6$, and accessory lighting an incandescent burner above the camera. This plate appears to be fully exposed, the lights are not harsh, and even the lamp needs no dodging to print out properly. The developer was pyro-metol, the plate as given above. (This picture is reproduced this week on page 685.)

"The Invalid" was taken with a R.R. lens working at $f/8$, and the result shows that a fast anastigmat is not a necessity, although useful. The exposure was two minutes, and one inch of magnesium ribbon which was burnt beside the camera made no appreciable difference in the shadows, although these might possibly have turned out blacker in its absence. The developer was azol, and the plate of the same make as before.

* "Answers to Correspondents" (which is reproduced this week on page 693) had an exposure of one minute at $f/8$, the sitter in this case being close to the light, and an opaque shade economising the illumination as much as possible. Two inches of magnesium ribbon were used to relieve the shadows, but were only just sufficient. It will be noticed that I have increased the proportion of magnesium ribbon to exposure in this instance, and that the quantity employed for this picture seems to be about correct. The developer was azol and the plate as above.

None of these results are particularly pictorial, the main object being to ascertain and demonstrate the effect of short exposures; but I think they are



A STUDY.

BY W. BARBER.

Awarded a Bronze Medal in the Special Subject Competition.

encouraging, and show the possibility of producing *bona-fide* lamplight pictures without trouble to anyone but the model.

I find I have not said anything in these notes about the use of backed plates, but I employ them for all purposes, and so have come to regard them as the normal medium for the production of negatives. In "Improving His Mind" there would certainly be a terrific halation round the lamp but for the black backing of the plate. Whether the ordinary brown caramel backing is effective I cannot say. I used it for "The Invalid" and "Answers to Correspondents," but neither of the subjects is at all trying in the matter of halation. I should advise the purchaser to buy his plates ready backed, and so to obtain the maximum benefit of the black backing.

QUERIES AND REPLIES

REGULATIONS.—(1) Envelopes must be marked "Query," and the "Enquiry Coupon" found elsewhere must be enclosed. (2) The full name and address in addition to a *nom-de-plume* must be given. (3) Only one question on one subject is allowed in each letter. (4) Prints may be sent for criticism, but a separate coupon must be sent with each print, and a stamped addressed envelope (not loose stamps) for their return.

A. DARLOW (Plaistow).—All's well that ends well.

J.W. (Redcar).—Your letter reached us four days too late for a reply in our issue of the 22nd.

J.S. (Dorchester).—We have no information about "Purolium"; nothing bearing that name, or anything like it, has been sent to us.

FAKEIT (Cheltenham).—Yes. "Practical Retouching," by Drinkwater Butt, price 1s. nett, or post free from our publishers 1s. 2d.

E.C.B. (Eastry).—There can be no objection, that we can see, to supplying the pictures to any other paper that will buy them.

G.P.D. (Ayton).—Messrs. R. and J. Beck, 68, Cornhill, E.C., will send you a leaflet giving full particulars of the "Cornex Index" on application.

J. MILLAR (Calderbank).—Your best plan will be to adopt the procedure given on page 540 of *Photography and Focus* for November 3rd, 1908.

F.W.C. (Kirby Moorside).—Two feet square is quite big enough for all ordinary purposes, and is preferable in our opinion to an oblong. We do not understand how you propose to "use it for printing as well."

L. AINSLEY (Alnwick).—No special background seems to have been used in this case; it is not necessary provided everything at all light in colour or near the sitter is removed. The artificial lighting will then ensure the darkness of the background. To get a perfectly dead black background, not only must the background itself be dark, but it must be kept in shadow.

RAYMOND (Blaenavon).—The stain is due to oxidation of the developer in the paper. It should not occur again if (1) a little potassium metabisulphite is added to the fixing bath (say ten grains to the ounce) and if (2) the prints are kept well under the surface of the hypo, so long as there is any risk of there being any developer still unwashed out of the gelatine.

APERTURE (Cardiff) has got a stop marked f/8 and wishes to know the diameter of the others. The easiest way to ascertain this is to draw a right-angled triangle, making the hypotenuse equal to the diameter of the f/8 stop, and the other two sides equal. The length of one of these sides will then be the diameter for f/11. Making that length the hypotenuse, and proceeding as before we get f/16, and by repeating the operation we can get f/22, f/32, f/45, and f/64.

H. ROPER (Nova Scotia).—Ordinarily we can only criticise prints by post, as stated above. We make an exception in your case this time on account of your distance. Technically the print is good except for slight under-exposure of the negative, which is the cause of the darkness of the face and figure generally. Pictorially it has no great claim of any kind, and what little it has is weakened by the fact that nearly half the total area of the print is simply a blank white sky.

MORELIGHT (Clerkenwell).—An acetylene burner *could* be more powerful than the ordinary incandescent gaslight—whether it is or not would depend on the burner. The candle power is not much guide in lantern work, as with incandescent gas and acetylene of equal candle power, the latter gives much the brighter picture on the screen, owing to the flame being so much smaller. The only plan that would be satisfactory would be to see the apparatus you think of using in actual operation before purchasing.

PICTORIAL PHOTOGRAPHY is very beautifully represented in "Le Salon International du Photo-Club de Paris," which has just been published by the firm of Charles Mendel, of 118 and 118 bis, Rue d'Assas, Paris. As a record of a photographic exhibition, we have seen nothing more appropriate. The size is a large quarto, and a great many of the illustrations occupy a whole page each, very carefully printed in colour on a tint. There are also a good many smaller reproductions among the text, but all are equally good. Moreover, by the use of a smooth, but not an excessively glossy

paper, the book can be both seen and read with comfort. The letterpress is from the pen of M. C. Ménard, and is adequate to its purpose. The work is not an "édition-de-luxe," it is not produced in a lavish way, unless the care and thought given lavishly to it are taken into account; but it is just the style of thing which might well be a model for a collection of the pictorial work of the year. The present volume represents France very well, but other countries poorly, although Mrs. Barton has the place of honour with her "Sister Catherine." We have no information as to the price, but this

J. RONDOCHOFF (Russell Square).—There would seem to be nothing for it but to take to amidol; we must confess we do not understand it.

DALESMAN (Pendleton).—There is no cure; but you might perhaps keep them unobtrusive by shading the sky as much as possible during fixing. They are due to insufficient rocking of the dish during development.

AMATEUR (Hylton).—The use of green carbon tissue is the simplest method; but green prints can be obtained by toning gaslight or bromide prints by methods V. and VI. on page 662 of our issue for December 15th.

DOLPHIN (Bradford).—None of the exposure meters with which we are acquainted are sufficiently sensitive for use with the weaker forms of artificial light; they can all be used with the electric arc or mercury vapour lamps.

C.M.R. (Enniskillen).—The spots are due to the developer oxidising in the paper while it lies in the fixing bath. If you use an acid fixer rinse the cards before fixing and keep them moving in the bath, you should have no trouble.

MISS M. F. HAWKER (Plymouth).—We will do what we can; but it is readers like yourself who make firms like this. If you send anything you value to some advertiser without any enquiry or reference you really only have yourself to blame.

J. ARCHER (Southend).—The band is the correct part of the negative; the parts all round it have been slightly fogged by light reflected from the bellows of the camera, owing to the use of a lens with a very wide angle of illumination and a short hood.

PRO BONO PUBLICO (Blackpool).—Your *nom de plume* is indeed a good one if you send your money about in the way you have done without making any enquiries. We are sorry to hear of your unfortunate experiences, but really you only have yourself to blame.

R. W. POOK (Brixham).—You must find this out for yourself, it only wants a little thought. If the film of the Kodoid occupies the position of the film of a plate, and we presume it will, then the plate method must be adopted. If otherwise, then the other.

N. T. PEARCE (Stourbridge).—Probably not if you are only visiting the country and the apparatus is part of your luggage and is obviously not new. We took a camera and a quantity of plates in without any trouble. If you are going to live there they will most likely charge you. The annual subscription is 10s. 10d.

SPIDER (Glasgow).—We prefer pyro-soda. In time development the plates are left in the solution for a certain definite time dependent on the make of plate and temperature of solution; in factorial development the duration of the development is decided by the time of appearance of the image multiplied by a certain factor. See Chapter XI. of "The Complete Photographer," where the different methods are discussed.

A.H.C. (Aberdare).—If the negative is placed in potassium bromide 20 grains, potassium ferricyanide 20 grains, water 2 ounces until thoroughly bleached, and is then rinsed and placed in clean hypo, the whole of the image will be removed, leaving only clear gelatine. The same result can be obtained with a two per cent. solution of potassium permanganate, to each ounce of which three minims of sulphuric acid are added. This needs no hypo bath. A good washing in each case completes the operation.

could no doubt be obtained by sending a postcard to the publisher, M. Mendel.

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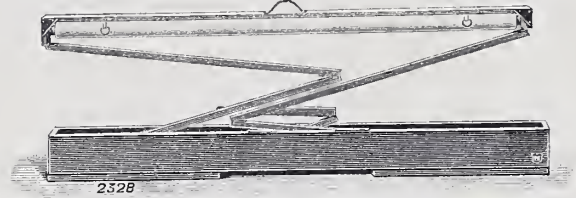
THE EURYPLAN LENS of Messrs. Staley and Co. has received a glowing testimonial from Dr. Lindsay Johnson, who reports that not only does it give "a stigmatic and coma-free image with the entire lens at full aperture over an area equal to the focal length of the lens, but does the same with either the front or the back half of the combination at full aperture, which in this particular series equals f/11.2; both elements are therefore perfectly corrected in themselves."

The Ensign Lantern Screen.

ONE of the most worrying features of a lantern show is usually the putting up of the screen. This trouble does not arise where a wall is set aside for lantern work, but for home use and in schools, where this is not often practicable, the erection and subsequent stowing away of the screen is simply a nuisance. All this is avoided by the Ensign lantern screen, which is shown partly extended in the illustration herewith.

The screen itself can be seen at the top of the apparatus, on a roller, and the supports fold up, so that the whole thing packs into the box at the bottom, the top bar, on which can be seen a leather loop for carrying, forming the lid. To set up the screen, the box is placed in the position required, with its two feet turned at right angles to its length, so that it stands firmly. The catch which holds the box lid closed is undone, and the top is simply lifted up. As soon as the two side supports, which are hinged in the middle, are straight, two hinged struts at the bottom hold them firmly, and the

screen is simply unrolled—it is on a spring roller—and secured at the bottom. The whole operation does not take half a minute, either for erecting or for closing up.



The price of the Ensign lantern screen complete, for a screen 4ft. by 4ft., is 32s. 6d.; for 6x6 it is 42s. The makers are, of course, Messrs. Houghtons, Ltd., of 88 and 89, High Holborn, London, W.C.

The Agfa Exposure Table for Daylight and Flashlight.

EXPOSURE tables and calculators are numerous enough; but it has been left for the "Agfa" firm to put forward one which combines the ordinary functions of such things for use when making daylight exposures, with a slide rule for indicating the quantity of flash powder to be used under given circumstances. This it can do very satisfactorily, since as our readers know, the company that is issuing the tables makes an excellent flash powder, known by its trade name of "Agfa," giving a very powerful light, to which the table refers.

To use the calculator for a flashlight exposure, one of the scales is set so that the f number of the stop comes against the distance in yards between the place where the flash is arranged and the object to be photographed. The quantity of flash powder that is required for any particular speed of plate can then be read off directly on another scale. Although primarily arranged for the plates of the "Agfa" brand, it

can be used with any commercial plate of which the H. and D. speed number is known by the photographer.

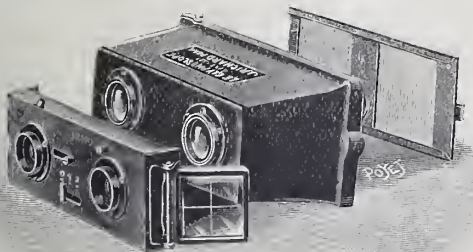
The other side of the tables furnishes an exposure calculator for daylight use. To employ this, the hour of the day on one scale is brought against the month on another. We can then read off against the H. and D. speed of the plate, the "relative light value." Setting the subject scale against this, the time of exposure is given at once for every stop. It is very simple to use and a great time saver.

Anything which tends to simplify the exposure problem by giving definite and reliable readings in place of random guesswork, deserves the heartiest commendation, and the "Agfa Exposure Table" is in this category, and as such we are glad to put its merits before our readers. It is an excellent little thing of its kind, and would save its cost (one shilling) in a very few days. It is supplied by Messrs. Charles Zimmermann and Co., Ltd., of 9 and 10, St. Mary-at-Hill, E.C.

The Glyphoscope. A Stereoscope and Camera Combined.

THOSE who want to take stereoscopic pictures with every advantage that a perfect instrument can offer have the well-known Verascope of the famous Paris house of Richard, which is all that they can desire for the purpose. But the Verascope, from the very nature of its construction and design, is a costly piece of apparatus and beyond the reach of many amateurs, who otherwise would be glad to have it. The latest Richard camera, "The Glyphoscope," has been put forward for those who want something on Verascope lines, but cannot afford that particular pattern.

The Glyphoscope is possible at a lower price, not from any



scamping of the manufacture or poorness of material or workmanship, but by simplicity of design. It is as well made as anything which Messrs. Richard produce, and the finish is all that the most captious critic can require. We have had one to test for the past few weeks, and found it a wonderfully reliable and sound little instrument—one which ought to win over many amateurs to stereoscopic photography.

For the Glyphoscope is not merely a camera, it is a stereoscope as well. Slip off the shutter and finder, which can

be done in a moment, place a transparency in the position occupied usually by the dark slide, look through the lenses, and the picture which was before the camera when the exposure was made is seen again in all its relief.

The external appearance of the Glyphoscope can be seen from our illustration, which shows the camera with the shutter removed and placed just in front of the lenses, and the metal carrier which holds the transparency also removed. As a camera, the body is constructed of ivory—a rigid black material—which keeps everything in perfect adjustment, acting, in fact, like a solid block. The two lenses are single achromatic combinations of 2½ in. focus, which allow pictures to be taken, without focussing, at any distance from 10ft. to infinity. For still nearer objects magnifiers can be adapted by which objects as close as a couple of feet may be brought into focus. The lenses are furnished with three stops. The shutter has adjustment for both time and instantaneous exposures, and a union is provided by which it can be worked by means of a pneumatic ball and tube. The finder is of the direct vision, brilliant type. The dark slides are of metal, single pattern, and six are provided with the camera. The size of plate it takes is 1½ x 4½. A feature of the instrument is the readiness with which every part can be got at for cleaning. The lenses, and even the shutter mechanism—and very sturdy and well constructed it is seen to be—can be removed and dusted, without the use of any tools.

Our description has no doubt sufficed to show that the Glyphoscope is very much more than a toy. It is a thoroughly sound, well built, pocket camera, a worthy addition to the list of Richard products. Its price we can only describe as wonderfully low, being 35s. complete, or, in wood (which is lighter, but more likely to be affected by damp or great variations of temperature), 38s. 6d. A descriptive leaflet of this remarkable little camera can be obtained by sending a post-card to Messrs. Richard, 23a, Albemarle Street, Piccadilly, London, W.



ABOUT TREES.

By W. L. F. Wastell.

Special to "Photography and Focus."

ROUND the small station where I waited for a train the fields were being eaten into by long rows of small new houses, and the landscape was plentifully polluted with building material. But one fine clump of trees still survived, and behind it the sky was blazing with the glory of an autumn sunset. Give me a fine sunset and a long-service pipe and I am happy. As I had both at the time, I waited with much complacency on the platform, and treated quite philosophically the fact that the train was abominably late.

Presently the stationmaster strolled up, bade me good

evening, and then, like myself, stood quietly looking westward. "Worth looking at, eh?" I observed, as the sun shot forth mighty shafts of light from behind a gold-rimmed cloud. "Yes, beautiful," he answered; "but I reckon they'll come down before long. I shall miss them. I love trees." Whereupon I realised that he had been looking, not at the sky, but at the clump of trees. He added a remark that at once proclaimed him a man with a vein of poetry in him, and not a mere automaton in uniform. "I could take off my hat to a fine tree," quoth he. At which I was glad that I had made no rude remarks about the lateness of the train.

The stationmaster was quite right. There is much to admire and respect about trees; and the photographer who has not found that out is not going to do anything great in the way of landscape. Trees play many and varied parts in the making or marring of landscape photographs. A single tree may serve as the keynote of a whole picture, while the mass of a well-placed clump is often wonderfully effective. On the other hand, a tree that finds itself excluded from the composition will deliberately stretch an undesirable but unnoticed branch into the field of view, and ruin everything. It has its revenge.

I must have photographed many trees in my time, from single spies to battalions, but I don't remember ever to have done justice to even the meanest of them, singly or collectively. Perhaps one reason is that, although I am almost station-masterly in my admiration for them, I am almost as ignorant on the subject of trees as an Egyptian mummy. I know when they look best in a photograph; I have learnt by sad experience some of their failings and artful picture-spoiling devices; I have admired them as a whole and in detail; but of their names and natures and peculiarities I know amazingly little. I have, indeed, a sneaking sympathy for the young lady who remarked to a learned professor as they stood beneath an ancient tree, "Ah, professor, what would this old oak say, if only it could speak?" "Madam, it would say, 'I am an elm.'"

But, after all, it is perhaps no great loss to the photographer that he is unlearned in tree-lore. It is more to his purpose that he should be able to appreciate form, mass, grouping, and tone. Colour he may see and delight in; but he must eliminate it from his pictorial calculations; or rather he must consider it as it will be when translated into monochrome, and to translate it correctly he must take suitable precautions with cunningly devised combinations of plates and colour screens.

It is generally one of the earliest of the photographic beginner's disillusionments when he realises that his pictures of forest glades and avenues of trees are barefaced libels on the originals. He has to admit that trees are by no means as black as they are printed. Even when he secures better tone rendering he finds that



A Woodland Path.

By James McGill.

trees are tricky things to deal with photographically. The foliage has a nasty habit of coming out a mass of distracting spots of black and white, the spaces between the leaves form high lights scattered here, there, and almost everywhere. An attempt to secure some diffusion of these hard, bright spaces, by throwing them a little out of focus, results in a shower of spherical blobs. Branches make awkward lines, trunks group clumsily.

Is there not character in trees, too; a physiognomy to be read, expression to be interpreted, for those to whom the universal harmony is more than a mere phrase. All are not like the man of whom it was written—

A primrose by the river's brim

A dicotyledon was to him;

And it was nothing more.

The character of trees, patent to the eye, is difficult to record—the airy gracefulness of the silver birch, the matted tangle of an old yew, the dignity of the pine, the bold decorative design of the chestnut, the massive strength of the oak, are too often but faintly echoed in our photograph. Consider, too, the complexion of trees, from the ruddy duskiness of the copper birch to the silvery paleness of the willow. Then, again, note how the moody sombreness of the cedar has a decidedly depressing effect upon the mind, while there are other trees (say, for example, those familiar trees in a French landscape like moulted mops) which decline to be accepted as anything but humorous.

Perhaps some day there will arise a great tree photographer—one who shall do more than make arboreal studies; one whose renderings of trees shall be to the ordinary photographs of them as, let us say, the portraits by Wm. Crooke or Furley Lewis are to the P.O.P. cabinets of the village professional.

I do not want to suggest that no photographer has yet done justice to trees. Some have done so; but only occasionally and incidentally. We are still awaiting the photographer with the knowledge and skill requisite for the task. When he arrives we shall see some fine pictures. He will portray for us the glorious masses of the rich summer foliage, the leafless network of twigs and branches against the winter sky, the dainty trees of the mist like pale silhouettes in grey. It will be part of his task, too, to present the wonderful beauty and variety of the form of detail. I have lain on my back on the edge of a varied wood and studied with delight the marvellous forms of leaf, and bud, and twig standing out against the blue sky. The variations are astounding, the charm



AFTER RAIN.

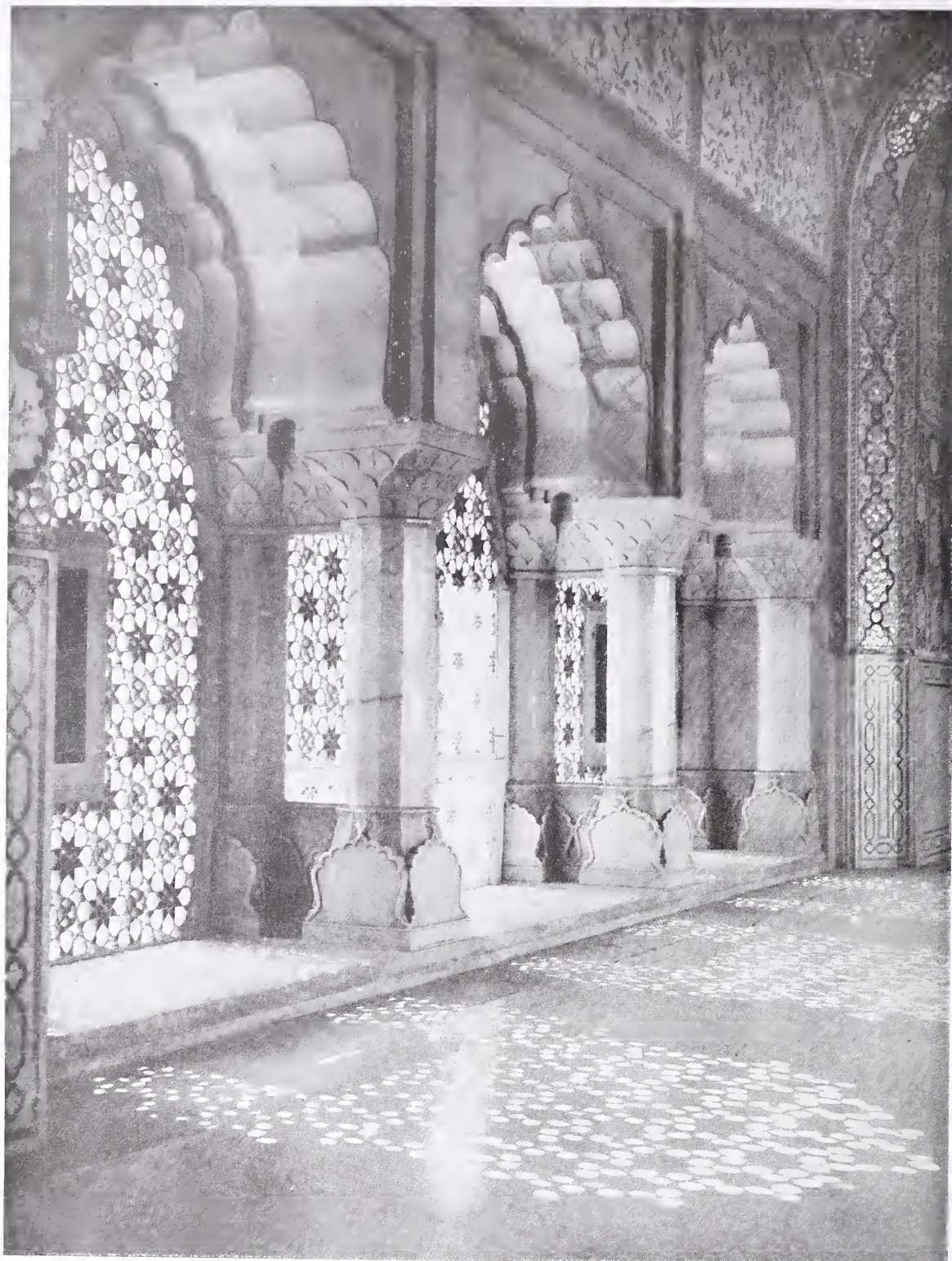
BY A. H. LEEVES.

Awarded a Certificate in the Beginners' Competition.

irresistible. Who has not paused to admire tree shadows on a sunny wall, or thrown by an electric lamp on a city pavement?

The photographic method seems admirably adapted to the adequate portrayal of trees. It makes comparatively easy a range of work that might well give pause to the most skilful and patient of draughtsmen. The accurate rendering of form and of intricate detail is easy to the lens while so difficult for the pencil. The material for the work is around us in bewildering variety and inexhaustible quantity. Who is going to respond to the call of the trees? I do not mean the call that inspires the diagram of the botanical textbook; I mean that other voice of the trees that breathes eloquently of beauty, and poetry and grace—the voice to which the good stationmaster's ears were attuned when he felt that it would not be inappropriate to remove his hat. Come, now, which of all our photographers hears that voice truly, and, hearing it, will answer?





THROUGH A MARBLE LATTICE.

BY G. P. SYMES SCUTT.

Of this picture the Editor of the "Journal of the Photographic Society of India" writes: "There are in our opinion few places in the East which afford greater opportunities to the photographic pictorialist than the ancient cities of Rajputana. 'Through a Marble Lattice' is an attempt to portray the brilliant effect of sunshine streaming through the marble tracery of the queen's palace in the Rajput stronghold of Amber, a few miles from Jeypur." Our illustration is from the photogravure in that publication, by permission.

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Twelve Months..	6 6	Twelve Months	10 10
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Three Months...	1 8	Three Months..	2 9
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ADVERTISEMENTS.—All communications on advertisement matters should be addressed: The Advertisement Manager, PHOTOGRAPHY AND FOCUS, 20, Tudor Street, London, E.C. All copy for displayed advertisements for the issue of any particular week must reach Tudor Street by the first post on Monday morning in the week previous.

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BOX NUMBERS.—For the convenience of advertisers, letters may be addressed to numbers at the office of the paper. When this is desired, 2d. will be charged for registration, and three stamped and addressed envelopes must be sent for forwarding replies. Only the number will appear in the advertisement. Replies should be addressed: "No. 000, c/o PHOTOGRAPHY AND FOCUS, 20, Tudor Street, London, E.C."

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ADDRESS.—All communications for the Editor should be addressed: The Editor, PHOTOGRAPHY AND FOCUS, 20, Tudor Street, London, E.C.

TO CONTRIBUTORS.—The Editor will be glad to consider original up-to-date manuscripts on photographic subjects. All contributions must be typewritten, or in very legible handwriting, on one side of the paper only, and should bear the name and address of the sender. Letters or communications arising out of matters already appearing in the paper are not paid for. The Editor disclaims legal responsibility for the safety of matter submitted to him, but he will endeavour to return rejected manuscripts, etc., when a stamped addressed envelope is enclosed for that purpose. No notice whatever can be paid to communications without the name and address of the sender, nor necessarily for publication.

PRINTS FOR CRITICISM.—Readers sending prints for criticism or advice are notified that in all cases it is understood that by so doing permission is given for their reproduction, without fee, in PHOTOGRAPHY AND FOCUS.

PRINTS FOR REPRODUCTION.—Reproduction fees are only paid by arrangement beforehand. The sending of a print, without any condition stated, will be taken as permission to reproduce it without fee. The Editor will be glad to consider for publication, with or without letterpress, photographs of special interest, on terms to be arranged.

PAYMENTS.—Articles and illustrations are paid for on acceptance.

INTERVIEWS.—The Editor will be at 20, Tudor Street, on Wednesdays, between the hours of 9.30 and 11.30 a.m., but can only be seen at other times by appointment.



THE RUGBY PHOTOGRAPHIC SOCIETY holds its exhibition in the Lecture Room of Rugby School, Hillmorton Road, on January 14th, entries closing January 7th. At 8 p.m. a lecture on the Alps will be given by A. W. Andrews, M.A., F.R.G.S.

THE PHOTO-SECESSION GALLERY, at 291, Fifth Avenue, New York, is at present occupied by an exhibition by members of the Photo-Secession. It is to be followed by exhibitions by Mrs. Brigran, Frank Eugene, M. Arbuthnot, W. Benington, E. Warner, Hugo Henneberg and H. Kühn, Baron de Meyer, Coburn, etc.

THE BOURNIX AND DISTRICT Photographic Society has just held its first exhibition. Medals were awarded to G. E. Mountford, E. D. Rodway, H. G. Sears, and honourable mention to G. E. Mountford. The annual subscription is 5s., and the honorary secretary Mr. Alfred Harris, of 96, Oak Tree Lane, Selly Oak.

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Price 1/- nett. Post free 1/2.

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(Illustrated.) By T. THORNE BAKER, F.C.S. F.R.P.S.

Price 6d. nett. Post free 7d.

All About Enlarging.

(Illustrated.) By C. WINTHORPE SOMERVILLE, F.R.P.S.

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Photography Made Easy.

(Illustrated.) By QUI-VIVE.
Price 6d. nett. Post free 7d.

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THE SOUTHEND-ON-SEA Photographic Society's competitions were won by C. A. Chandler (still life), E. J. Higgins (figure study), H. E. Franzmann (landscape), and D. Scott (novices).

× × × ×

FOR EXPOSING VELOX PAPER Mr. W. F. Slater, at the Cleveland Camera Club, recommended the use of magnesium ribbon, as the same length burnt at the same distance from any particular negative will always give the same result.

× × × ×

THE BOROUGH OF TYNEMOUTH Photographic Society holds its exhibition from February 3rd to 6th, entries closing January 23rd. The entry forms are now ready, and can be obtained on application to the honorary secretary, Mr. Jos. R. Johnston, of 29, Drummond Terrace, North Shields.

× × × ×

"THE PRISM" for November, the little magazine issued by the Bausch and Lomb Optical Co., deals with the Tessar lens. It will be sent free of charge to any reader who sends a penny stamp for postage to Messrs. A. E. Staley and Co., 19, Thavies Inn, Holborn Circus, E.C.

× × × ×

THE SERVICE CO., LTD., ask us to announce that its telephone numbers in future will be 260 Central and 2071 City. The report for the year ending September, 1908, shows that it has been the most successful year of the company's existence, gross profits amounting to £5,342.

× × × ×

THE LEICESTER and Leicestershire Photographic Society holds its exhibition from February 11th to 20th. There are open classes, and one restricted to members of the Midland Federation. The prospectus and entry form can be obtained from the hon. secretary, Mr. Harry Cross, 80, Harrow Road, Leicester.

× × × ×

THE GLASGOW and WEST of Scotland Amateur Photographic Association holds its annual exhibition on February 13th, entries closing January 20th. For prospectus, etc., applications should be made to the honorary secretary, Mr. James McKissack, of 68, West Regent Street, Glasgow.

× × × ×

A WARNING. Mr. T. F. Connolly, of 53, Bradbourne Street, Parsons Green, writes: "As a warning to readers, it may serve a purpose to point out how a quarter-plate Newman and Guardia high-speed Universal camera (No. 1.237) with Zeiss Planar lens (No. 38,011) advertised in your columns, was stolen by means of a trick. The thief having called, seen the camera, and obtained an ordinary visiting card from the owner, called again later during the owner's absence. Showing the visiting card as evidence of a message, and presenting a dummy parcel, he was allowed to take the camera away in exchange. It seems absurd that it is still necessary to warn people that a visiting card and a plausible story are not evidence of an authentic message."

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H.W.P.

BEGINNERS' COMPETITION.

Open to all photographers who have never taken an award.

PRIZES.

First Prize.—A signed copy of "The Complete Photographer," a half-guinea work by Mr. Child Bayley, now in its second edition.

Second Prize.—A free subscription to *Photography and Focus* for twelve months.

One or more certificates of honourable mention will also be awarded.

RULES.

(1) Each competitor can send as many prints as he likes, but each print must bear on the back the coupon, published each week, the name and address of the sender, the title of the picture, and no other writing whatsoever.

(2) No print will be eligible that is larger than 5½ in. × 3½ in. (postcard size) or 5 in. × 4 in.

(3) No print must be mounted.

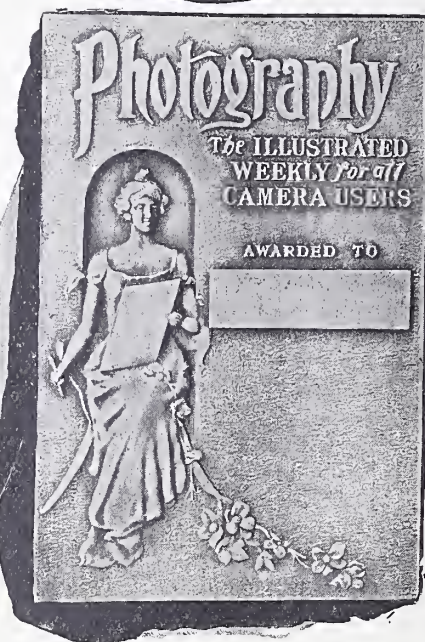
(4) No handwork other than simple spotting is permitted on negative or print, nor shading or dodging of any kind. It is distinctly understood that entry in the competition implies a declaration by the competitor that this rule has been complied with; and in case of dispute, the editor shall have the right to call for the negative from which the entry purports to be a simple direct contact print.

(5) No prints will be returned, and no correspondence with regard to the competition can be undertaken.

(6) The publishers of *Photography and Focus* shall have the right to reproduce, without payment, any of the prints sent in, winning or otherwise. But except the winning prints, the names of competitors of other prints that may be reproduced will not be published without the competitor's consent.

(7) All entries must be addressed "Beginners' Competition," the Editor of *Photography and Focus*, 20, Tudor Street, London, E.C., and must be delivered at that address by the first post on the closing date at the very latest.

CLOSING DATE.—Thursday, Dec 31st.



ADVANCED WORKERS' PRINT COMPETITION.

PRIZES.

First.—"Photography" Silver Plaque.
Second.—"Photography" Bronze Plaque.
Third.—"Photography" Bronze Medal.

One or more certificates of honourable mention will also be awarded.

RULES.

(1) All photographs must be sent addressed "Advanced Competition," the Editor of *Photography and Focus*, 20, Tudor Street, London, E.C., postage paid, to reach there not later than the first post on the closing date, and must contain a stamped addressed envelope or label (not loose stamps) if they are to be returned.

(2) Each photograph must be mounted, but not framed. Prints in slip-in mounts are not eligible. Each must bear on the back the name and address of the sender and the title of the picture. No letters or other communications must be enclosed with the prints. Every print must bear attached to its mount a coupon for the competition of the month, which will be found in each issue of the paper.

(3) Each photograph must be the work of the competitor as regards selection and arrangement of the subject, exposure and development of the negative, and printing, development or toning, and mounting of the print.

(4) The prints which are accompanied by stamped envelopes or labels will be criticised by post, and the editor shall have the right to reproduce any of the prints, winning or otherwise. The awards will be made a fortnight after the closing date.

(5) Awards may be increased or withheld at the absolute discretion of the judge, and in all cases of dispute the decision of the editor will be final.

(6) There is no restriction as to the eligibility, except as set forth in these rules, and except that the same negative must not be used more than once in the competition. That is to say, that a print from it once submitted, all further prints, however varied, are ineligible.

(7) Neither editor nor publishers of *Photography and Focus* shall be held in any way responsible for the safety of prints or for their return to the competitors.

(8) The sending of a print to the competition will be regarded as a declaration to the effect that it is eligible under these rules, and that the competitor agrees thereto.

CLOSING DATE.—Thursday, Dec. 31st

SPECIAL SUBJECT COMPETITIONS. OPEN TO ALL READERS.

PRIZES.

First Prize.—"Photography" Plaque in Silver.
Second Prize.—"Photography" Plaque in Bronze.
Third Prize.—"Photography" Medal in Bronze.
One or more certificates will also be awarded.

RULES.

(1) The subject of each photograph entered must be that announced for the particular competition.

(2) Each competitor can send as many prints as he likes, but each print must bear on the back the name and address of the sender, the title of the picture, and no other writing whatsoever. Each print must have attached to it a coupon for the competition of the month, which will be found in each issue of the paper.

(3) No print must be mounted. No handwork other than simple spotting is permitted on negative or print, nor shading or dodging of any kind. It is distinctly understood that entry in the competition implies a declaration by the competitor that this rule has been complied with; and in case of dispute, the editor shall have

the right to call for the original negative from which the entry purports to be a simple direct contact print.

(4) No prints will be returned, and no correspondence with regard to the competition can be undertaken.

(5) The publishers of *Photography and Focus* shall have the right to reproduce, without payment, any of the prints sent in, winning or otherwise. But except the winning prints, the names of the senders of other prints that may be reproduced will not be published without the sender's consent.

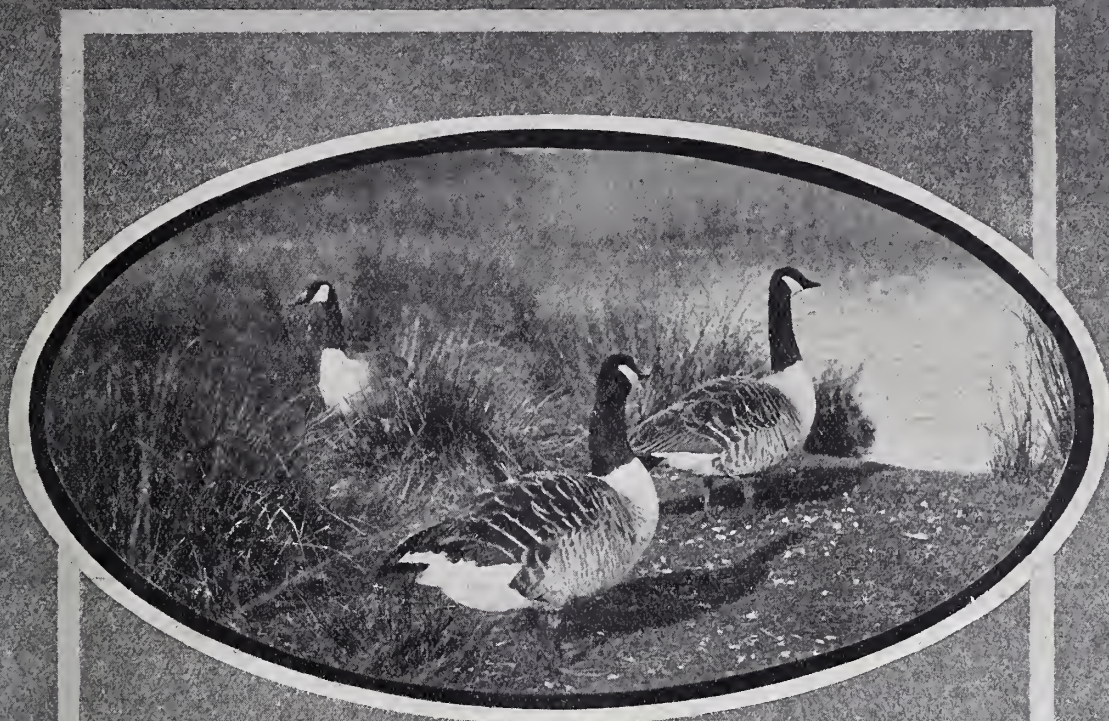
(6) All entries must be addressed "Special Subject Competition," the Editor of *Photography and Focus*, 20, Tudor Street, London, E.C., and must be delivered at that address by the first post on the closing date at the very latest.

SUBJECTS AND CLOSING DATES.

A subject suitable for use as a Christmas or New Year Card. Closes Thursday, December 31st.

A Winter Landscape. Closes Saturday, Jan. 30th, 1909.

A Portrait by Artificial Light. Closes Saturday, Feb. 27th, 1909.



WELLINGTON
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Enlargements



A One-solution Uranium Intensifier.



THE uranium intensifier is favoured by many workers because it is simple to use, and is very powerful in its effects. Though the results cannot be described as permanent, still they are not quite so impermanent as many seem to imagine, and, in any case, permanency is not an essential with quite a number of negatives.

The negative is simply immersed until the effect required is produced. The plate is then washed in a few changes of water and dried. As the colour of the image changes to red the amount of effect required can only be gauged by experience.

Difficulties are met with sometimes, but they are mainly due to attempting intensification upon plates that are not quite perfectly fixed, or else not properly washed after fixing. In fact, the uranium intensifier is a very good test for good fixing and washing; the only objection to its effects as a test being the fact that when the result shows faulty procedure the negative is most probably spoilt.

There is, however, no difficulty in ensuring perfect fixing and washing, and if the plate is given a short soak in chrome alum and citric acid after washing out the hypo, then the

The solution when mixed will not keep; but Dr. Lüppe Cramer has published a one-solution formula that keeps very well if not too much exposed to the light. The formula is as follows:

10% solution of potassium ferricyanide	2 ounces
10% solution of uranium nitrate	5 ounces
10% solution of potassium oxalate	5 ounces
10% solution of hydrochloric acid	1 ounce
Water	10 ounces

This solution not only keeps well, but it tends to give a clear stainlike image instead of a somewhat muddy and granular one.

Over-washing of the intensified image will remove some of the intensification, and give an uneven patchy result; while if a little alkali is added to the water the whole of the intensification will rapidly disappear. For this reason it is as well to add a little acetic acid to the washing water, seeing that tap water is often slightly alkaline. Washing is complete when the yellow stain of the ferricyanide has gone from the clear gelatine parts of the image.

When this stain is obstinate there is a risk that the intensified image may be damaged; and to prevent this it is best to apply a bath of 2% ammonium sulphocyanide to the intensified plate. This quickly removes the stain, and then a very short wash is sufficient.

One of the advantages of uranium is the fact that the intensification can be completely or partially removed if desired by the simple short application of an alkaline bath, or of tap water for a longer period. If, however, there is any chance of such removal being necessary, the two-solution formula, not the other, should be used, and the sulphocyanide bath should be omitted. In the one case silver is lost in the toning bath, and in the other it is slightly dissolved in the sulphocyanide; therefore it is impossible to restore the



Making the Rich.

By A. J. Wilson.

uranium bath can be applied without any fear. A good formula for the acid alum bath is—

Chrome alum	1 ounce
Citric acid	$\frac{1}{4}$ ounce
Water	20 ounces

This keeps best in a double strength solution, which can be diluted for use. Of course the plate must be washed after the alum bath and before intensification.

The intensifier is usually kept in two solutions—one a 2% solution of potassium ferricyanide, and the other a 2% solution of uranium nitrate. Equal parts of these solutions are mixed, and one dram of acetic acid is added for every ounce of the intensifier. This forms a fairly strong intensifier, and if only a slight effect is required it is as well to dilute it.

negative exactly to its original condition. If the two-solution bath is used, and then the red intensification removed, the silver is all left in the image. Some of it is, however, in the form of a silver salt, and, therefore, the application of a developer is desirable to reproduce the full blackness of the original.

Intensified negatives keep all the better if varnished. If, however, they are kept in a dry place and not exposed to the light, except when required for printing, they will keep very well indeed for quite a long period. ("Photo Notes.")

The next number of *Photography and Focus* is the first of a new volume. It will deal specially with snow and frost photography, and will be fully illustrated.

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Gaslight Paper.*

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"The time has come, the Walrus said, to talk of many things."

THERE has been an outbreak of correspondence in the papers lately about that blessed word "snapshot." The letters varied from the plaintive to the idiotic. They condemned the poor word "snapshot" in unmeasured terms; and as practically all the writers were against it I promptly declare for it. When there's a row I don't care a dump which side I take as long as I am in it, although I prefer if possible to be on the wrong side.

* * *

The first objection is to the word snapshot itself. To some photographers it is like a red rag to a cow's husband. They think it suggests a hurried aimless shot at something, with a camera instead of a gun; and they want people to believe that they never, never, never make an exposure without bringing the full force of their massive mentality to bear upon it.

* * *

As a matter of fact the word snapshot was introduced as a convenient word to indicate an exposure so brief that the camera could be held in the hand for it. The earliest of such work was pretty considerably bad, and therefore the word became a term of reproach. But the productions of such distinguished workers as myself have long since removed that stigma, and, to those who really know, the word snapshot is now synonymous with all that is highest and best in pictorial photography.

* * *

You may grin as you read my views, my dear but chuckle-headed friend; but you can't disprove this statement—take the best photographs of the best photographers and you will find that the majority of them have been produced from what are technically known as "snapshots." Therefore this abused word is one of established virtue and reputation to all but the superficial and ignominiously ignorant. (End of swipe the first.)

* * *

Now we come to the greater objection still, viz., that from the noun "snapshot" have been evolved the words snapshotter, snapshotted, and so on. It is argued that we should say snaphooter, and that we should conjugate the verb in the same way as the verb to shoot. I plead guilty to having used the word snaphooter, but it has been done with my tongue in my cheek. A man who makes photographs is a photographer; a man who makes snapshots is a snapshotter. That is good sound English. On the other hand let us assume the verb "to snaphoot" as we have been requested, nay implored to do, and see what we arrive at. For example, I shoot a snipe; I snaphoot my aunt; I shot a snipe; I snapshot my aunt; the snipe is shot; my aunt is snaphoot. Lovely, isn't it? Whatever would auntie say? Although I do not remember to have seen the word I think it would have been quite legitimate when most snapshots were villainously bad to have characterised bad work as "snaphooty." The word would have been expressive and appropriate. But according to the jeremiads in the daily papers we ought to have said the work was "snaphooty." And this from people who label the word snapshotted as ugly and barbaric! I claim that these newspaper gasbags are shouting up the wrong street (fancy a gasbag shouting!), that they haven't a leg to stand on (gasbags with legs!), and that they are utterly flattened out as gasbags should be. (End of swipe the second.)

* * *

Well, that's my little contribution to the row. Now tread on the tail of my coat who dare!

* * *

After that exhilarating shindy I turn with joy to a more blissful and enchanting subject. I have a great liking for a certain photographic society. The members, fortunately, only count one poet amongst them, and even he is not so bad as one might fear. When the members have a social and convivial meeting, which they have at least once a week, the

poet sits down and builds a poem and then gets up and sings it. In most circumstances such a proceeding would be a savage and wicked act, but our poet breathes forth in dulcet tones such tidings of comfort and joy that I guarantee there is not a society in this land that would not rise as one man to crown him with laurel and with bay. Hearken, I pray you, to a fragment of one of his gladsome messages:

"We shall buy new apparatus

For to lend to members gratis,

And Watson's holostigmats will be plentiful as peas;

Reflex cameras to lend you,

Little black boys to attend you,

And to lug your whole-plate outfits just wherever you may please.

Once a week there'll be an issue

Of fresh-made carbon tissue,

Kodak roll-films will be free, and bromide paper will be freer;

For the photographic tyro

There'll be hogsheads of free pyro,

And for the more experienced there'll be hogsheads of free beer."

* * *

The rhymes and metre may be open to criticism, but the sentiments are excellent. It will be noticed that it is entirely written in the future tense, and whether all these things actually materialise or not I cannot say. But it must be delightfully comforting only to receive such glowing promises, and no doubt nobody remembers anything about them next morning. Perpend again:

"At our coming Exhibition

We shall make it a condition

That the secretary works as he has never worked before;

While we curse him in a chorus,

He'll enlarge our pictures for us,

And he'll trim, and mount, and frame them, at his own expense, what's more!

And when he's done all the drudging,

We'll step in and do the judging,

And award each other mighty plaques of eighteen carat gold

And when people come to view them

He will sell our pictures to them;

And he'll have to stand the racket when they find that *they've* been sold."

* * *

I like the poet. I respectfully bow to him. Many a time I have tried to describe the ideal exhibition, but have always failed. He has put the whole matter in a nutshell, or rather a verse.

* * *

I don't know what the secretary's views may be, and I don't care. A secretary has no business to have views. His duties are clearly laid down in the above verse. Let him attend to them and put his views in his pocket. There should be plenty of room for them there.

THE WALRUS

SUBSCRIPTIONS.

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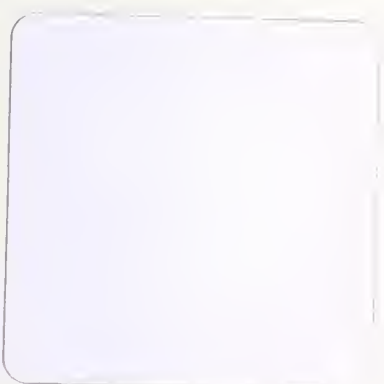
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